End User Guide

The ExtraView User Guide provides information on all the end-user topics of the ExtraView web-based issue tracking system. This online guide is aimed at end-users of ExtraView and can be used to complement the individual solutions guides. All the common information required to use ExtraView is within this guide, including how to navigate around the product, how to add and update issues, how notification works, and how to get the most out of reporting and querying.

Downloadable PDF

The End User Guide is downloadable as a single PDF by clicking here. You will need the Adobe Acrobat Reader to view this.

Introduction

ExtraView is a Web-based business process management system designed for organizations that need to track product and service issues, manage product requirements, improve team communication, and increase the efficiency of core processes. It is especially powerful in meeting the needs of applications in regulated industries, where a high degree of audit capability is needed.

This document covers the use of ExtraView in a number of pre-configured solutions. Note that all administrative functions are covered in the ExtraView Administration Guide. This guide covers the end-user aspects of using ExtraView. The version of ExtraView that you install may or may not include pre-configured solutions. These solutions can most often be downloaded from the ExtraView web site. You may use any or all of these unchanged, or you may alter the functionality of an individual solution, or you may turn off any unneeded pre-configured solution (the administrator uses the Grant Security Privileges function in the Administration section to do this). In addition, the administrator may also create new tracking systems, named Business Areas. Sample Business Areas include tracking systems for the following types of systems:

- Bug Tracking
- CAPA
- Knowledgebase
- Customer Support
- Feature Requests
- Helpdesk
- Task Management
- Adverse Event Reporting
- Safety Issue Tracking

Linking worldwide functional teams, ExtraView collects and routes requirements, defects, customer support calls, trouble tickets, and enhancement requests into one easy-to-use Web-based system. ExtraView represents and enforces your workflow and processes without the need for expensive programming and time-consuming setup. ExtraView's intuitive operability and easy customization allows developers, engineers, quality assurance personnel, and others to devote their time to resolving immediate product development issues instead of spending their time implementing and maintaining costly, unwieldy, or poorly integrated internal tracking systems. In addition to creating and maintaining internal processes and workflow for greater efficiency, ExtraView can also empower your customers and partners. ExtraView makes it easy to provide limited data views so that customers and other outside users can submit issues, track issues, and verify resolutions without compromising the security of internal issues.

The Issue

This guide will often refer to an *issue*. An issue may be an issue, ticket, defect, customer support call, help desk record, or any other type of item stored in the ExtraView database.

Getting Started

Prior to signing on to ExtraView, there are a few simple things you must know, in order to successfully take advantage of the many features.

Screen Resolution

The resolution of your desktop monitor or screen on which you use ExtraView should be a minimum of 1280 x 1024 pixels. While ExtraView will work within your browser at lower resolutions than this, you may have to scroll up, down and sideways more than you would like. Note that it is an individual preference to select the size of font you want to view within your browser. If you are using ExtraView's Workspace feature, it is useful to have a minimum screen resolution of 1600 x 1200 or greater.

Supported Browsers

The list of supported browsers can be found here.

Never Use the Browser "Back" and "Refresh" Buttons

Your browser’s "back" and "refresh" buttons do not work within ExtraView. Only navigate by the buttons that are displayed on ExtraView’s menus. The reason is that ExtraView must maintain integrity of its information at all times. For example, if you press the button on ExtraView’s Add Issue screen to add a new record to the database, then press the back button and press the add button again, you will have two records inserted. This is obviously a problem! Similarly, your process to update records may involve a workflow that can be disrupted, if you press the browser back button after a step has been taken.

Turn on Cookies in your Browser

Most browsers have cookies turned on as a default setting. However, if they are not turned on, you must turn them on in order to use ExtraView. ExtraView will warn you if cookies are not turned on, and will not function. Most browsers will work without problem with ExtraView.

To Turn on Cookies in Internet Explorer

- Select **Internet Options** from the **Tools** menu on your browser
- Click the **Security** tab
- Click the **Custom Level** button
- Set **Allow cookies that are stored on your computer** to **Enabled**
- Set the Allow per-session cookies to **Enabled**
- Click the **OK** button on the two open screens.

Turn on JavaScript

Most browsers have JavaScript turned on as a default setting. If they are not turned on, you will need to turn them on in order to use ExtraView. ExtraView will warn you if JavaScript is not turned on.

Turn on JavaScript in Internet Explorer

- Select **Internet Options** from the **Tools** menu on your browser
- Click the **Security** tab
- Click the **Custom Level** button
- Set the all of the **Scripting** options to **Enabled**
- Click the **OK** button on the two open screens.

Character Sets within your Browser

ExtraView must work consistently with a single character set, in order that information entered within different browsers across an organization will be compatible, and can be stored on and retrieved from the ExtraView server in a consistent manner. This is less of a problem with languages based on the Roman alphabetic, but is an essential ingredient of correctly configuring a system where users use double-byte languages such as Japanese and Chinese. Your system administrator will have decided on the character set your installation will use. Most likely, this will be a character set named UTF-8, which is universal and supports all languages. You should check that your local browser is set to the value. Your administrator will inform you if this should be changed to a different value.

Note: It is strongly recommended that HTTP_CHARSET is set to a value of UTF-8, and that all users only set their browser character set to UTF-8, so that characters will be displayed correctly and consistently.

Hardware Considerations

As long as you have configured your browser and other software as described above, ExtraView should work satisfactorily on you computer. However, if you make extensive use of workspaces, with a combination of multiple workspaces and many open panels within your workspaces, it benefits having faster, and/or multiple CPUs, plus a significant amount of memory. Browsers are more efficient in this environment, and will provide a speedier response.

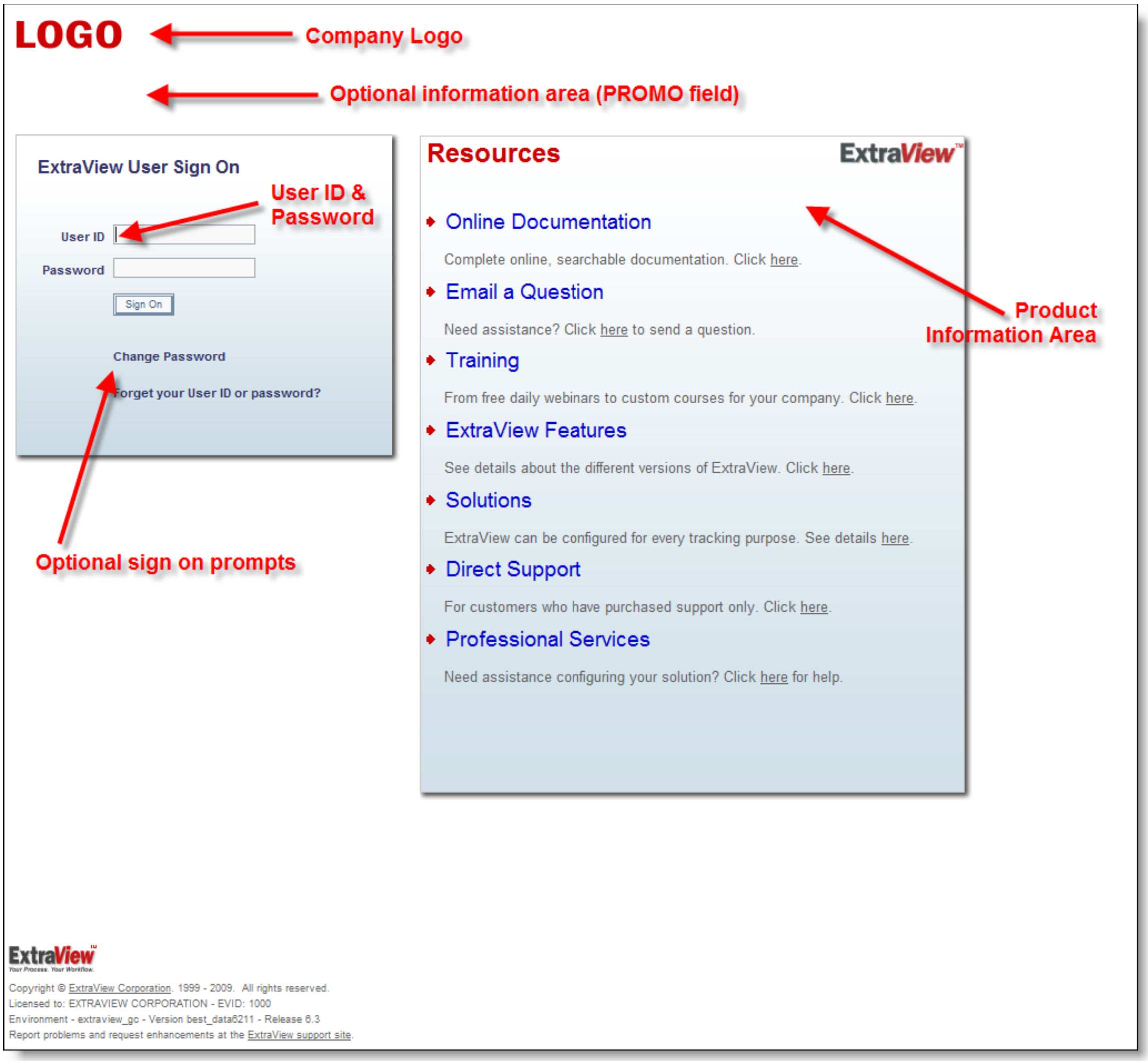
ExtraView Functional Highlights

Tracking and reporting is the heart of ExtraView's user functionality. The following list highlights some of ExtraView's most important tracking and reporting features. Note that not all of these functions may be available to every user, as the ExtraView administrator is able to precisely control which features each user has the ability to access.

- Simple, flexible, and customizable Web-based interface
- Unlimited scalability of the number of issues, customer support and other issues, user roles, users, fields, business rules, reports, and attachments
- Ability to split issues into multiple parts for individual tracking
- Ability to group related issues together, either within a single tracking area, or across multiple tracking areas
- Perform mass updates to the entire group of issues
- Automatic email notifications containing customized content
- Threaded email discussions of issues
- Ability to impose business rules and processes on the issues you enter as they move from initiation to closure
- Dynamic interest lists to notify users of changes to cases and specific events
- Ability to perform queries with either simple or complex filters
- Produce custom statistical and summary reports from any Web browser, and export to PDF, MS Word, MS Excel, or text
- Charting of results
- Complete audit trails on all updates and workflow transitions with analytical, statistical, summary, and historical issue-change reporting
- Ability to keep cases private for specific groups of users or publish to a larger community
- Integrated knowledge base
- Quick data entry using pre-defined forms
- In-depth detailed reporting at any drill-down level, including the ability to design reports that are available system-wide or only for your own use
- Ability to share filtered data with customers

User Sign On Screen

ExtraView is secure. Before all users can use ExtraView, they must sign on by supplying a valid combination of a user name and password.



ExtraView User Sign On screen

ExtraView has a set-up option that allows the Administrator to assign a user name and password to individual users or else allows the user to self-register (user self-registration will be discussed in a later section). If this option is turned on, there will be an additional self-registration prompt on the user Sign On screen.

There may be other options on this screen, for example allowing you to immediately send an email to your system administrator when you need help.

When you type the ExtraView Web address into your browser (as provided by the administrator) you are asked to enter your user name and your password in the spaces provided. You may change your password at this time, by clicking on the link at the bottom of the screen. If you enter either an invalid user name or password, you are prompted to try again.

Note the Product Information area on the sign on screen. Your administrator may have turned this off, or may have replaced the information with different contents. If this information is being sourced from ExtraView Corporation's servers then the information in this area will be altered from time-to-time.

If you see a message in red within the copyright section at the bottom of the screen, this has three potential causes:

- Not eligible for support from ExtraView Corporation - Your company's support contract has lapsed. You are able to continue using ExtraView, and can continue to add new users to the system. You are not able to upgrade your system until you have obtained a new support contract from ExtraView Corporation
- Not eligible for support from ExtraView Corporation or this installation has an expired evaluation license - You are able to continue using ExtraView. You are not able to upgrade your system until you have obtained a new support contract from ExtraView Corporation
- Unmatched Schema - You have not completed an update or upgrade to your system. New code has been applied, but the database has not been updated.

Sign On to ExtraView

- Enter your user ID in the field labeled User ID
- Enter your password in the field labeled Password
- Press the **Sign On** button or press the **Enter** key on your keyboard and you will now see your personal ExtraView Home Page.

Note: If your company uses a mechanism known as Single Sign On, then you may be instructed by your administrator to use a different sign on sequence.

ExtraView User Sign Off

After you click the **Sign Off** button on the main ExtraView navigation menu, you are returned to the ExtraView User Sign On screen.

You now have the opportunity to:

- Sign on to ExtraView using a different user name and password
- Sign on to ExtraView using the same user name and password
- Self-Register as a New User, if this option is enabled by your administrator
- Change your password
- Point your browser to a different Web address and navigate away from the ExtraView environment

Password Expiration

The Administrator may require you to change your password, in which case you will be prompted to provide your old password plus your new password when signing on.

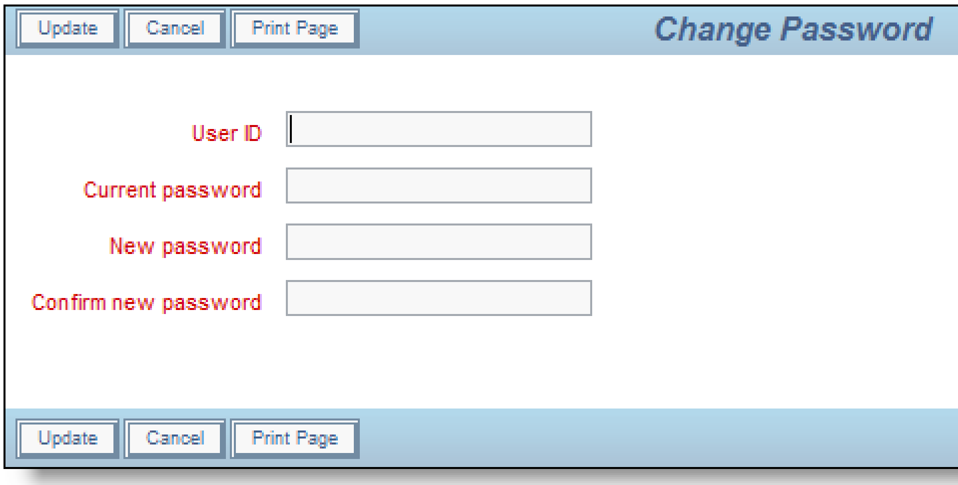
The Administrator may also have set an option that automatically expires your password after a set period. When this period is reached, you will also be asked to provide both your old password and a new password.

In both cases described above, you will have to re-enter your password after changing your password, in order to gain access to the system.

Changing Your Password

As mentioned above, you may be required to change your password or else you may simply wish to change your password periodically.

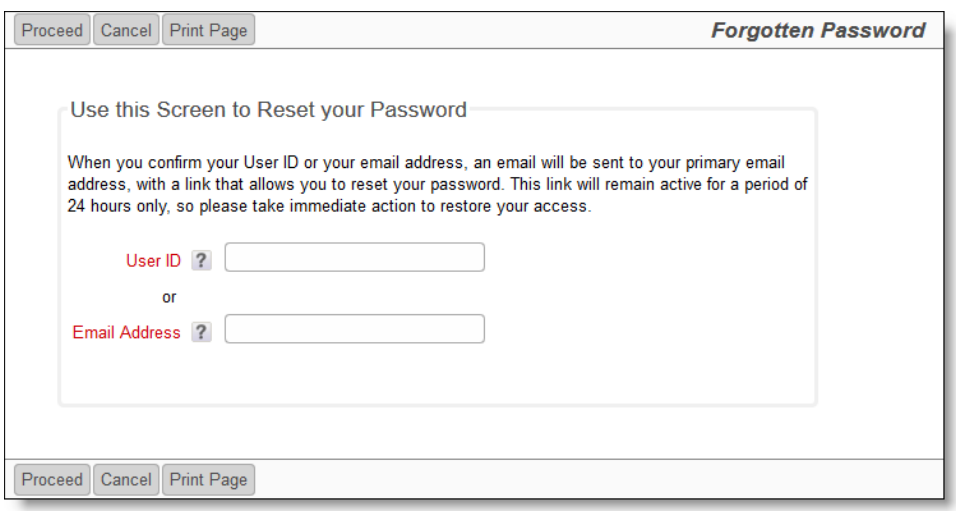
- Click the **Change Password** link on your ExtraView Sign On screen
- Enter your information on the Change Password screen
- Click the **Update** button.



Change Password screen

Forgotten Passwords

If there is link on the sign on screen with the text **Forget your User ID or Password?**, then clicking this allows you to reestablish your sign on credentials. You will see a screen like this:



Forgotten Password / User ID Screen

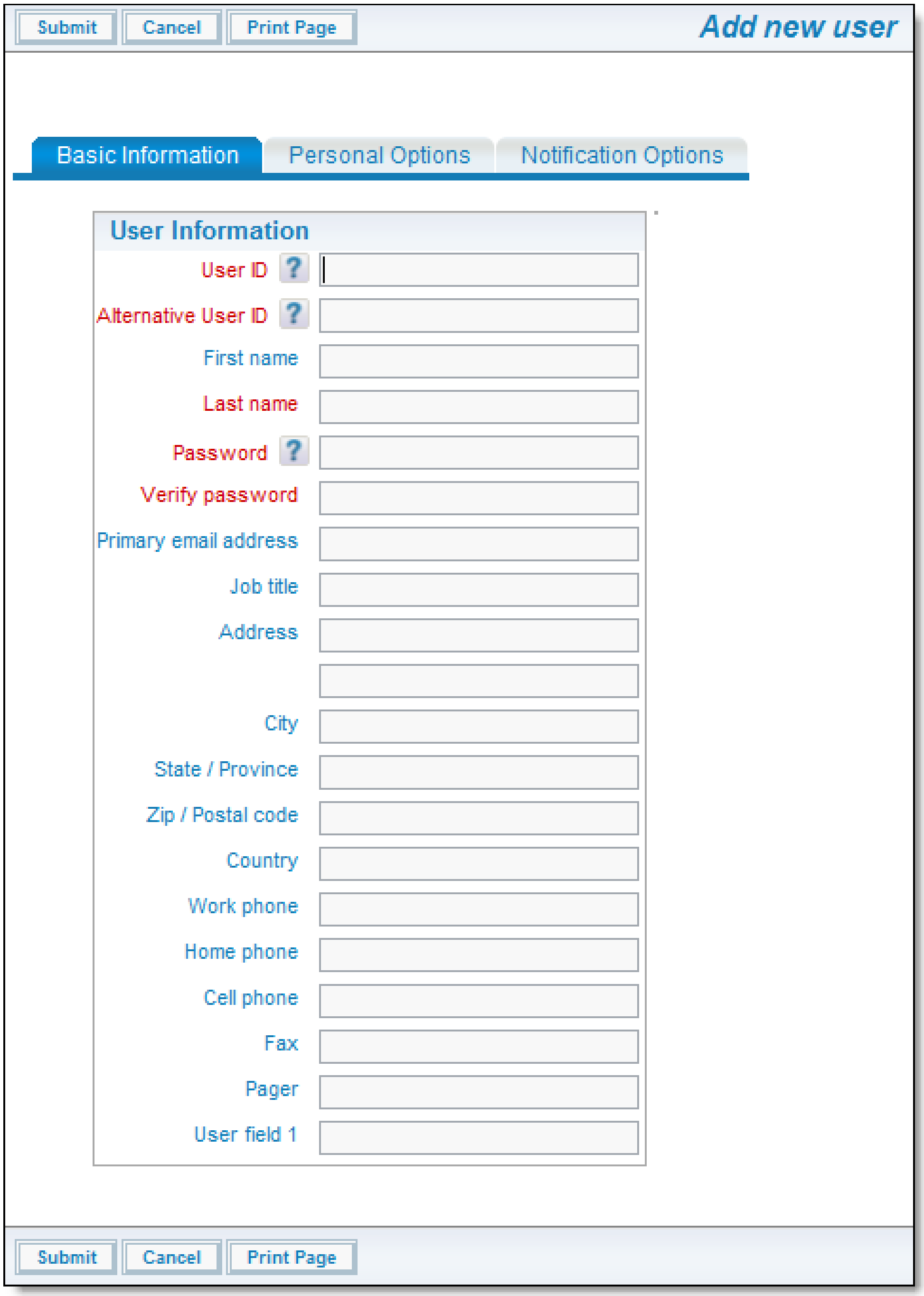
You must be able to enter your valid User ID or your email address. Once you have done this, the ExtraView server will send you an email with a link that allows you to reset your password. This link must be used within 24 hours, and it can only be used a single time before it expires.

Self-Register As a New User

You only need to self-register to use ExtraView if your Administrator has not assigned you a user name and password. If your Administrator has disabled this option, it will not appear on your screen. If you self-register as a user, an email is sent immediately to the administrators of ExtraView, to confirm your registration.

ExtraView Sign On screen

- *Enter your personal details and your personal options on a screen similar to the one below:*



Add New User screen

- You can press the tabs at the top of the screen to move to enter your personal details, personal options, your report options and your notification options
- You can return to this screen at any time, as long as your administrator has given you permission. This is achieved from the main pull-down menu seen at the top of most pages once you have signed onto ExtraView
- Once you have entered all of your information, click the **Update** button.

Note: The highlighted fields (usually shown in bold or in a different color) are required, while the other information is desired, but optional. The Administrator will have decided which fields are optional and which are mandatory for your installation. Remember that you will not be able to receive ExtraView Email Notification unless you type in a valid Email address.

Note: If you self-register in ExtraView, you may not get a wide range of privileges. The Administrator normally allows self-registering users to only see and access a minimal amount of information. You should contact the Administrator if you require a higher level of access.

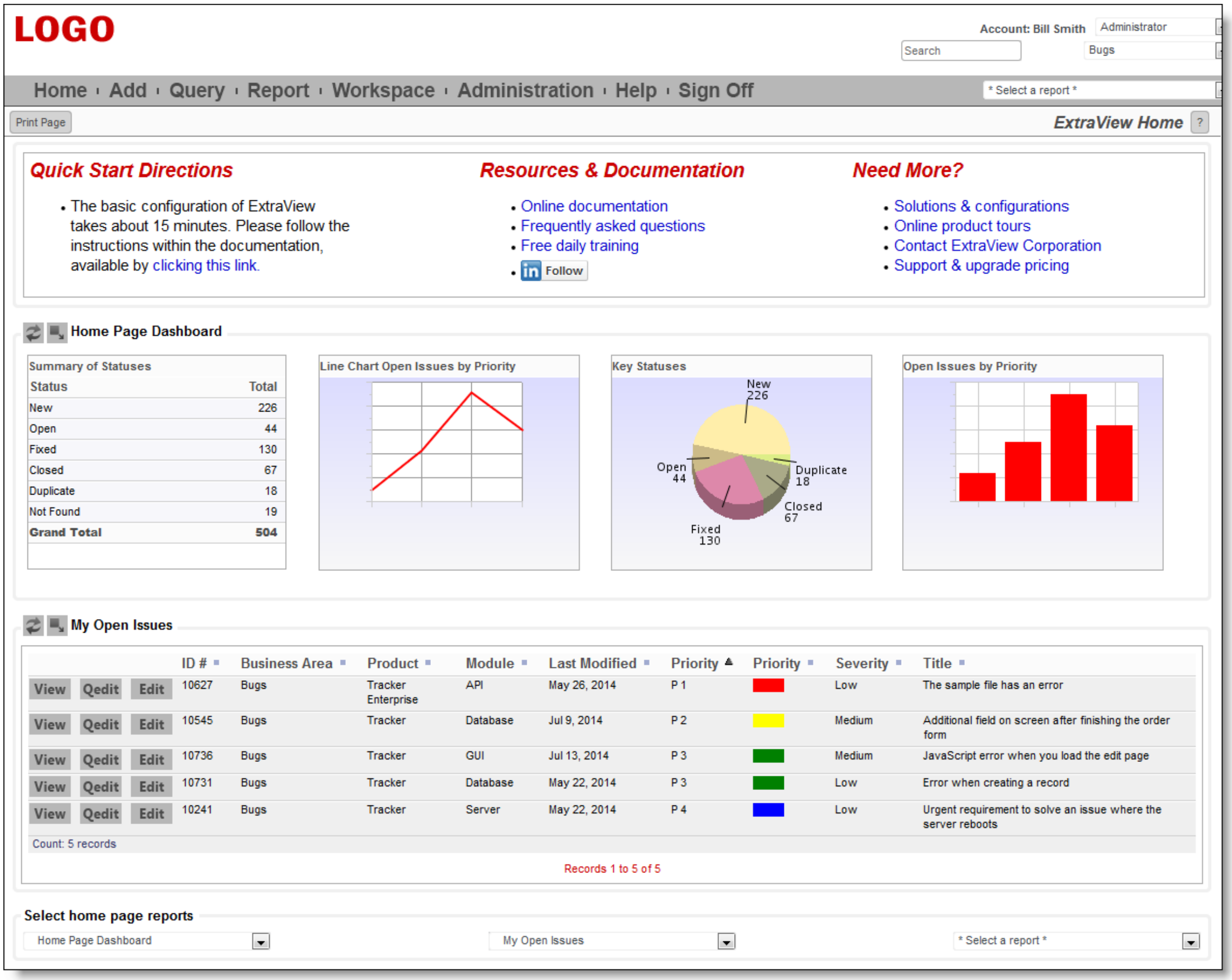
Conditions that sign you off from ExtraView automatically

The most common reason that ExtraView will sign you off automatically is that your administrator has set an expiry period on the length of time for which you may remain idle and still remain signed on. If you are idle (you do not submit a request or a form to the server from your browser) for more than this period, then ExtraView will only allow you to continue after signing on again. The principal reasons for the administrator setting this are for security and to make most efficient use of the ExtraView licenses that your organization has purchased. These licenses may be shared amongst many people. When ExtraView signs you off automatically, you are asked to re-enter your user ID and password to continue working. When you were signed off the system by ExtraView, the alert shows a **Session expired or removed** message, by Administrator followed by the code.

Alert Code	Meaning
RC1	The referenced session no longer exists. The most likely reason is that the user was idle longer that the time allotted by the system administrator and the user was automatically signed out of the system. This condition may also be caused by the administrator restarting the server while you were in the middle of a task
RC2	The cookies returned by the browser don't match session cookies held on the server
RC3	The session expired in the foreground
RC4	The session was removed by administrator
RC5	Your IP address changed during the session and this is disallowed by the system administrator. Normally ExtraView performs a check for security purposes, to ensure that your IP address remains consistent. However, this check can be disabled if you part of a network where your IP address is automatically translated for any reason. This is most often seen when accessing a corporate network via a VPN or proxy server.

Standard Interface

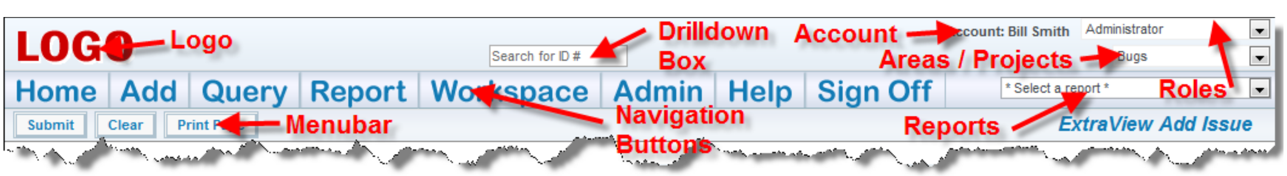
The ExtraView standard interface is a traditional web-based menu system, with a navigation bar that provides access to all the key user functions. The functions are accessed one-at-a-time, screen-by-screen. This is in contrast to the ExtraView workspace interface which, in addition to a navigation bar, provides a complete windowed interface, with as many open panels as are required by the user. Between many of the panels, you can interchange data with convenient drag-and-drop. The standard interface is typically used for straightforward processes where users carry out a single task at a time. The workspace interface is a tool that lends itself to multi-tasking where users might need to quickly move between different tasks, or where users require the power of a windowed interface wth drag-and-drop capability.



A typical home page

Navigation Bar

The ExtraView main navigation bar appears at the top of most screens throughout the application. It allows instant access to the main functions of ExtraView. The navigation bar may be customized to any one of a large number of themes, so the following screenshots are representative of the functions as opposed to the color, size and location of the elements. Not all of the elements may be present in your installation as they depend on permissions and the configuration that your administrator has created.



Navigation Buttons

This list shows the standard buttons within the navigation bar. Your administrator may have configured different buttons, with different purposes on the navigation bar. This includes the presentation of a navigation bar that has "drop-down" selections.

- **Home**: The user's personal Home page
- **Add**: Allows users to enter new issues into the database
- **Query**: Allows users to search the database
- **Search**: Allows users to create and run reports
- **Workspace**: Opens a workspace window where you can perform many ExtraView tasks in a single window
- **Admin or Administration**: Allows Administrative users to configure ExtraView for the entire organization. As a user you may not have access to this area of ExtraView **Help**: Allows users to access ExtraView's online help system
- **Sign Off**: Click the **Sign Off** button to log out and return ExtraView to the Sign On screen.

Other Elements

Drilldown Box: This is a Search box that allows you to enter either keywords or issue ID's to retrieve matches. The following rules apply:

- You may enter a single issue ID, or multiple issue ID's. Separate multiple issue ID's with a semi-colon character. If there are no results, ExtraView will attempt to treat the issue ID's as words and look for these as text
- You may enter any single word or multiple words. ExtraView treats these as Quickfind queries and fetches the results
- If you start your entry with a # character, then the search can be complex. Please see the Quickfind documentation for full instructions

Account: Your name that you are signed on with appears on the navigation bar. This is also a link to your personal options. Clicking on your name accesses your personal options

Roles: Provided you have access to more than one user role, you will see a select list which contains all the roles you may adopt. When you select a new role, you are taken to the Home Page, and your role is reset

Business Areas / Projects: Provided you have access to more than one Business Area and/or Project, you will see a select list which contains all the Business Areas and Projects you may adopt. When you select a new Business Area and/or Project, you are taken to the Home Page, and your current Business Area and/or Project is reset

Report List: If your administrator has turned this feature on, you will see a list of public and personal reports that you may run. Simply select the report you want to run from the list and a new window will open with the results of the report

Menubar: This is a set of buttons that will alter as you alter the page you are viewing in ExtraView. It will offer a range of options that is relevant to the screen you are looking at.

Note: Button names and the name of the ID within the ExtraView Menu frame may be altered to reflect your company's terminology. Your Administrator can also choose to display the ExtraView Menu as a horizontal screen menu, if this is preferred.

Personal Options

Click on your name in the navigation bar to access your personal options on the the **Change a user's details screen**. See this page for details on how you manage your personal options.

Roles

On the navigation bar, you may also have a list of roles that are available for you to adopt. This list of roles is the ones that the administrator allows you to adopt for different purposes. For example, you might have several roles, each corresponding to the use of a different Business Area. Simply click on the role you wish to adopt. If you have only been enabled for a single role, you will not find any links on this list, and you will not be able to change your role.

Business Areas and Projects

If this is enabled as an option on your navigation bar, then this list offers you the ability to move into a new Business Area and a corresponding Project. Depending on the configuration, you may or may not see this select list, or you may only see Business Areas and not Projects. The only Business Areas and Projects which will be visible will be those to which the Administrator has granted you access.

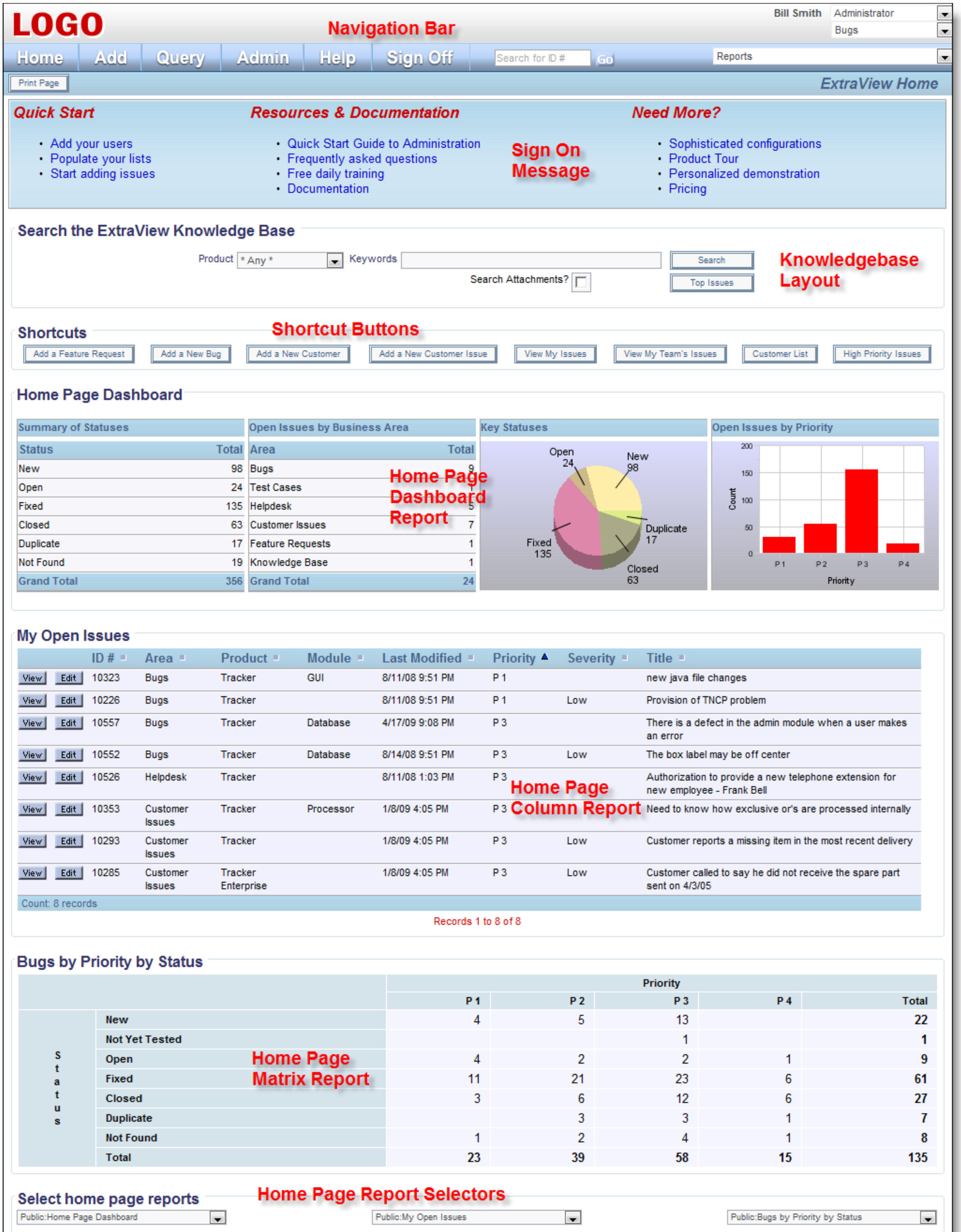
Reports

There may also be a list of reports that you can run from the navigation bar. If this is present, simply select a report from the list and this will be run immediately.

Home Page

The Home Page presents the following sections to you:

- Navigation Bar – Key options to access features of ExtraView and to access your personal options and to change your Business Area and to change your role
- Sign On Message – A message area that your system administrators uses to communicate with you
- Home Page reports – Up to three reports can be displayed. By the title of each report, there are two buttons, one to refresh the report and the second to allow you to drill down and open up the report in another window. If the report was saved to output to a format other than the browser, it will appear in that output format. For example, a report that was saved to send its output to Microsoft Word will open the drilldown report within Microsoft Word
- Optional access to a knowledge base. This will be configured by your administrator.
- Optional access to shortcut buttons. This will be configured by your administrator.



Typical home page

Mobile Interface

The mobile interface allows one or more ExtraView installations to be accessed from your mobile phone or tablet.

Installation on Apple Mobile Devices

Download and install ExtraView from the Apple Apps store. There is no cost for the app.

Installation on Android Mobile Devices

Download and install ExtraView from Google Play. There is no cost for the app.

Features

The key features of the mobile clients are:

- ExtraView recognizes a valid sign on from an authorized user, and will display the most appropriate screens for the device. For example, if you sign on from a phone, layouts designed specifically for small screens will be displayed. If you sign on from a tablet, a layout designed specifically for a medium-sized screen will be displayed, and, of course, if you sign on from a desktop computer with a browser, layouts designed for desktops will be displayed
- Data entry screens, such as the *add* issue and the *edit* issue screen have optional features, to allow the user to page through forms that might contain many, many fields on a desktop layout. Your administrator will have broken down the workflow into discrete steps, allowing bite-sized chunks to be handled on each small screen that is presented to the user. The user can simply move back and forwards between these pages
- There will typically be a customized navigation bar on a mobile installation, making it quicker and easier to reach the screen or report you wish to utilize
- Assuming your administrator has given permission, your User ID and password that you use on the sign on screen may be stored to save you re-entering the information each time you access ExtraView
- ExtraView interacts with local facilities on your mobile device, such as a camera and the photo album. You can take photographs directly from within the ExtraView app and upload them into image fields, document fields or attachments
- From your desktop computer, you can decide which reports you want to have available on your mobile device. There may be thousands of reports that you can run on your desktop computer, and this number would be impractical to work with on your mobile device, so there is the ability to be selective in which reports you access on your mobile device.

Limitations

The following are limitations of the mobile interface to ExtraView. Future versions will relax some of these:

- There is no ExtraView administration support within the mobile interface

- Uploading non-image file attachments is not supported on Apple iOS devices, because Apple mobile devices do not allow access to their file system to upload files
- Report editors are not supported. You should use a desktop client to create and modify reports
- There is no Query mode with the mobile version. However, you can use the **Search** navigation menu entry to query for most items and you may create reports with runtime filters to emulate much of the query functions
- These report types are not supported, principally because they are highly interactive and there is insufficient space on a mobile screen: Calendar; Planning; Dashboard; Custom URL; Container reports
- Quickedit on column reports and Quicklists is not supported
- The record selector on Quicklists and column reports is not supported
- Drilldowns on charts are not supported
- Workspaces are not supported
- In general, operations which require a popup window within a screen are not supported. Where possible, the mobile device will bring up a new screen, and then return to the original screen after the operation that required a popup is complete
- Accessing the history or audit trail of an issue is not supported
- Date fields on *add* and *edit* screens are always presented in the medium format, with time
- Some workflow elements such as modal popup windows are not supported.

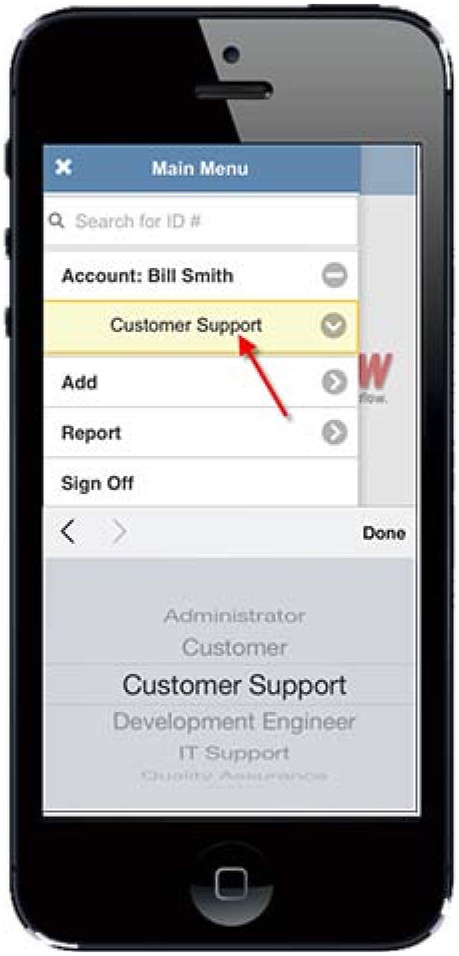
The Navigation Menu

The Navigation menu has been configured by your site administrator to give you access to the appropriate functions to which you have permission. It will look something like this:

Click on each section of the menu to open it and see what your site administrator has configured. It is likely that all installations have the **Search, Account** and the **Sign Off** entries.

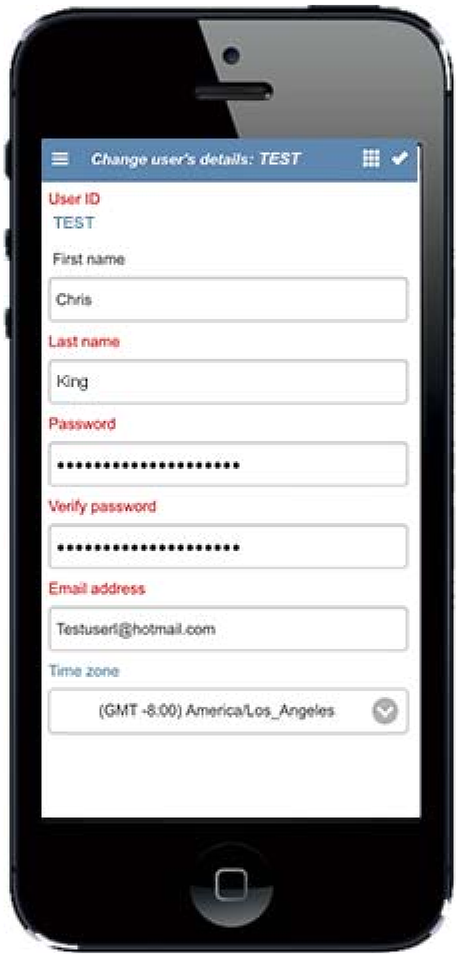
The **Search** input allows you to search for one or more keywords or one or more issue ID's within your database. If you're searching for more than one keyword with the fields of an issue, separate the words with spaces. If your're searching for multiple issue ID's separate them with semi-colons.

The **Account** entry allows you to alter your role and your current Business Area, providing your site administrator has given you permission to these functions:



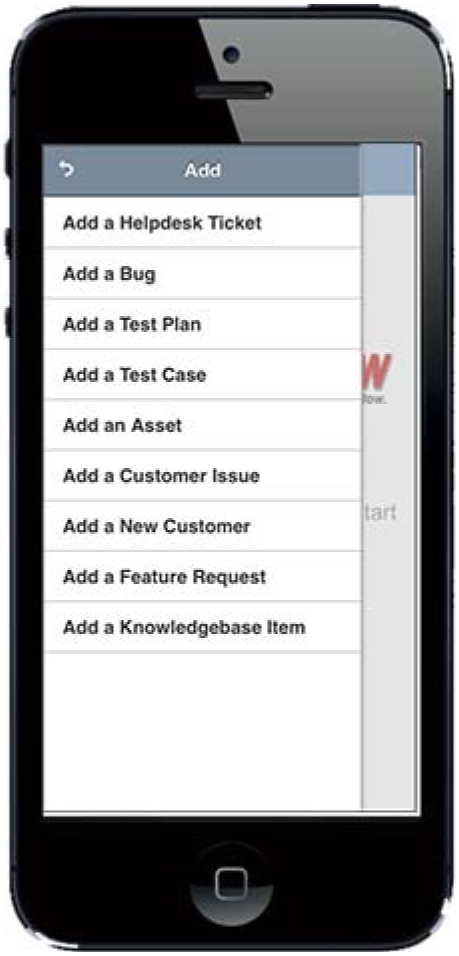
The **Sign Off** entry ends your session and returns you to the Sign On screen.

If you click on the **Personal Options** menu entry, you are asked for your password, then you are taken to a screen similar to this:

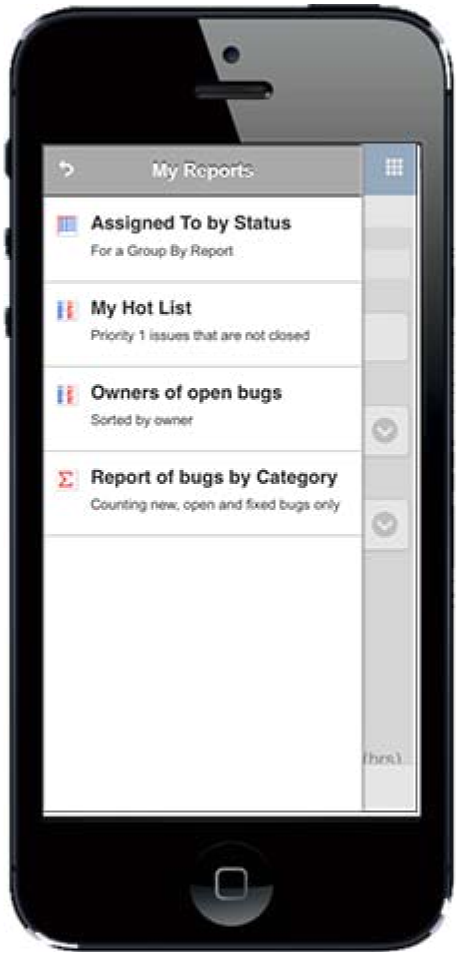


Note that the fields presented to you on this screen vary, according to how your administrator sets up your system.

It is likely that the remaining buttons on your navigation menu will have been customized. In this example, the **Add** entry allows you to add one of several types of issues:



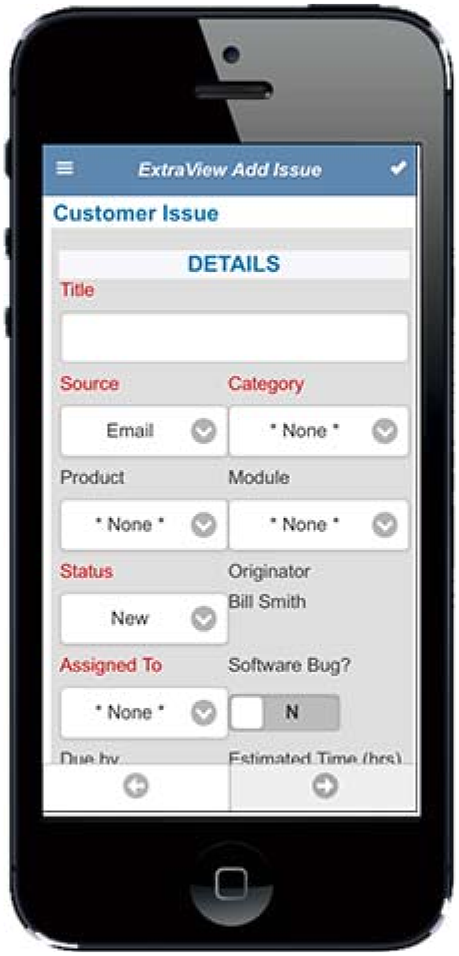
The **Report** menu allows you to run any report that has been set up for you to access. You can set up personal reports you want to access on your mobile client from the desktop interface. Your site administrator will probably also have given you permission to run various public reports. A typical reports menu looks like this:

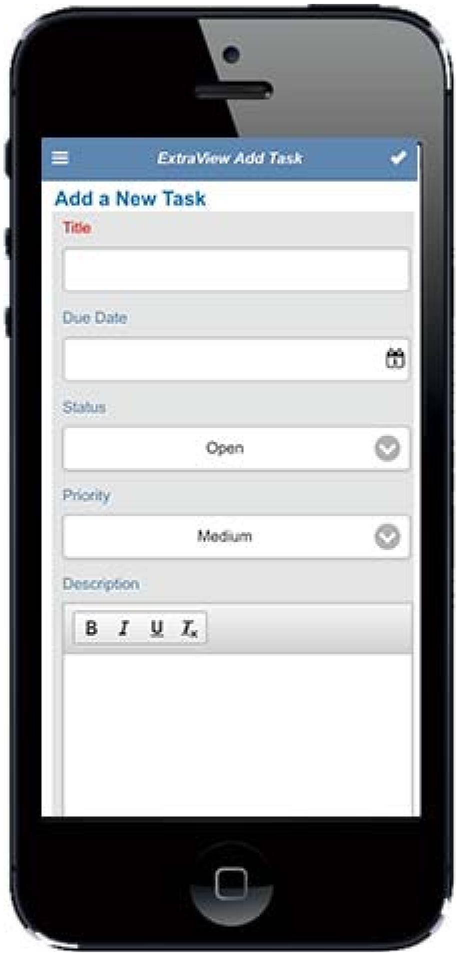


Reports may be enclosed within folders, and they support runtime filters, just like the desktop client.

Adding & Updating Issues

Adding and updating issues is virtually the same as when you are working with your desktop browser. Your administrator will have configured layouts for your screens that are equivalent to the desktop layouts, but will be more suitable for viewing on the small formats of phones and tablets. Following are two screenshots with samples of *Add Issue* screens.


ExtraView Add Issue
Customer Issue
DETAILS
Title
Source
Category
Email
* None *
Product
Module
* None *
* None *
Status
Originator
New
Bill Smith
Assigned To
Software Bug?
* None *
N



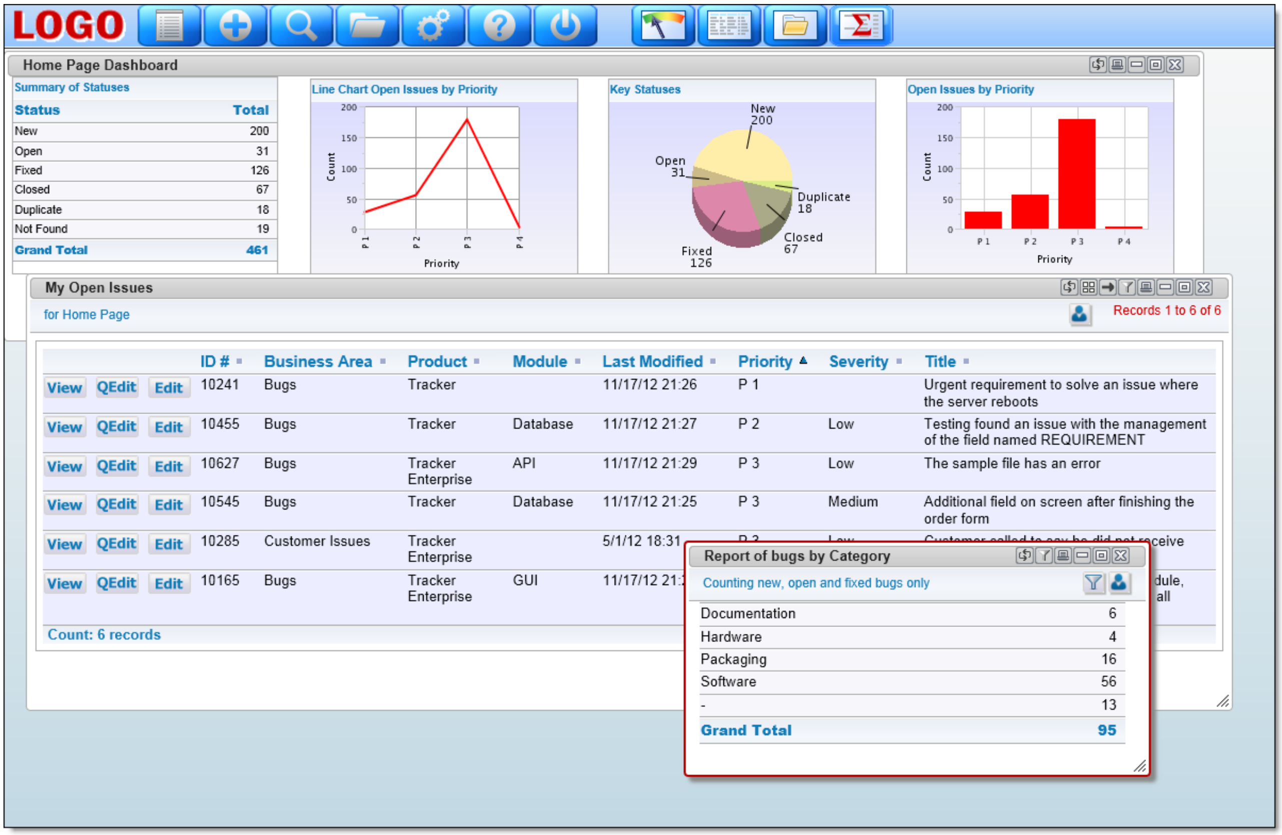
There are a few points to notice on the above screens. First, to submit your issue, use the button in the top right-hand corner of the screen. There night also be a second button close by the Submit button. Your administrator may have configured this to contain additional options for the screen. Your administrator may also have configured two buttons at the bottom of the screen, allowing you to move forwards and backwards through the workflow. This is often much more convenient and usable than scrolling a long way down a very small screen.

Workspace Interface

Workspaces provide a single browser window within which you can run all of ExtraView's functions. Within the browser window, a separate panel is opened for each function. For example, you might open an *add* screen, an *edit* screen, and several reports, all at the same time. Each panel has a title bar that contains buttons to control the functions within the window, as well as buttons to minimize, maximize, and close the panel.

This is in contrast to the ExtraView standard interface which provides access to ExtraView functions one at a time.

The standard interface is typically used for straightforward processes where users carry out a single task at a time. The workspace interface is a tool that lends itself to multi-tasking where users might need to quickly move between different tasks, or where users require the power of a windowed interface wth drag-and-drop capability.

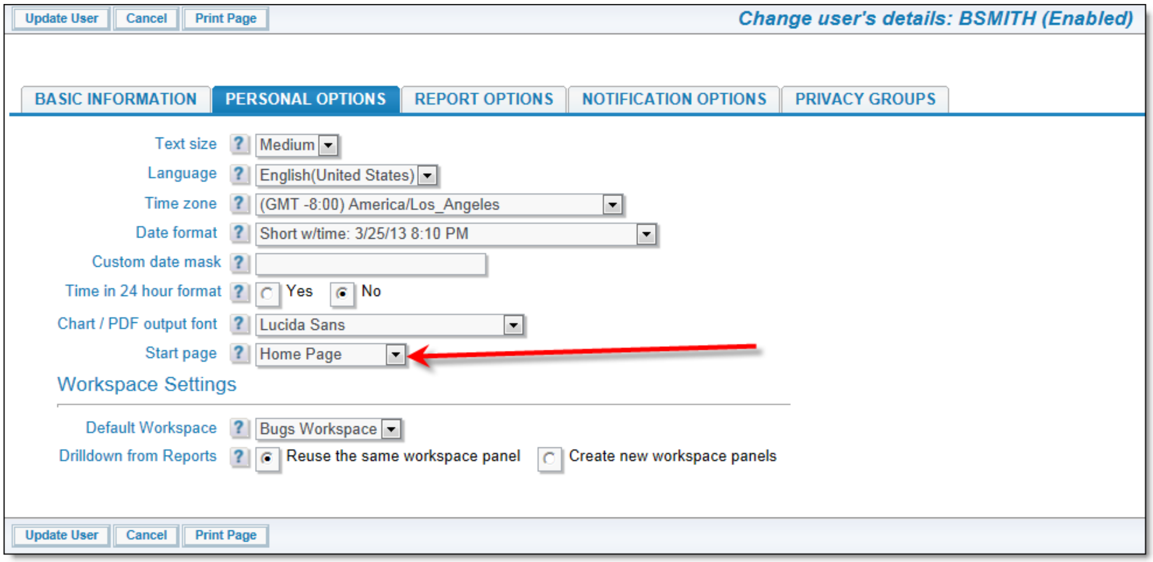


A typical workspace

If the administrator has given you permission to use workspaces, you may have any number of workspaces, and each may contain different panels. You may save the state of the workspaces, and these will be restored when you reopen them.

Setting Your Start Point in ExtraView

There are several start pages that are provided as alternatives to the Home Page. This icludes workspaces - this is an alternative user interface to the standard user interface. With permission, you may start your ExtraView session in the standard interface, or within the workspace interface. You may also switch between the interfaces.



Setting where you start in ExtraView

Use your personal account options to set the screen where you would like to start your ExtraView session. If you choose the workspace interface as your start point, you can also select the title of the workspace with which you which to start. You can have as many workspaces as you would like for different purposes. Each saved workspace is set to your choice of role, Business Area and Project, as well as any combination of panels opened when you open the workspace.

If your administrator has granted you access to workspaces, there is also a section where you can set different settings for your workspaces, such as options on what happens when you drill down from a workspace, and which workspace you want to load when you first sign on to a workspace.

Navigation Bar

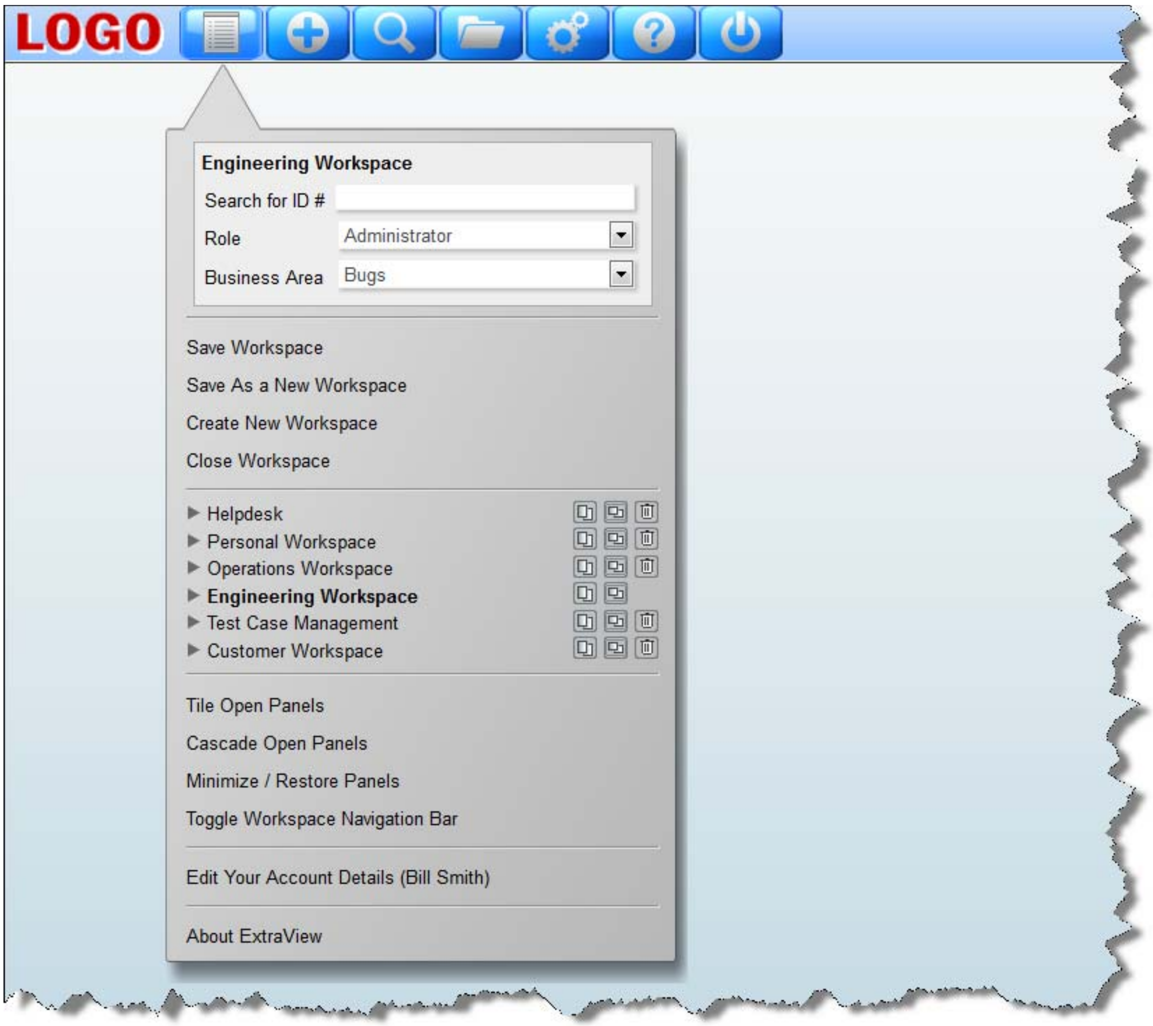
A typical workspace navigation menu looks like the following screenshot. Observe the icons on the navigation bar and the workspace canvas beneath. As you open new workspace panels, an icon for each is added to the navigation menu and a panel with the function is opened on the canvas. You may click on any of the icons to bring the panel represented to the top of your workspace. The workspace may occupy a space wider and higher than both your browser window and your computer screen. Scrolling across the virtual space is permitted. You may drag a panel off the visible portion of the workspace and leave it there. Clicking the panel's icon in the navigation bar results in the panel becoming visible, wherever it is on the canvas, and coming to the front of all other panels.

Workspace navigation

Note that your administrator may have configured different navigation buttons to appear on your site. This includes the presenation of navigation bars that might include "drop-down" list selections.

The Workspace Menu

When you access the Workspace Menu by moving your mouse over the first button on the navigation bar, you are shown a panel that allows the following to take place. Not all the options will be available, if your adminstrator has not granted you access.

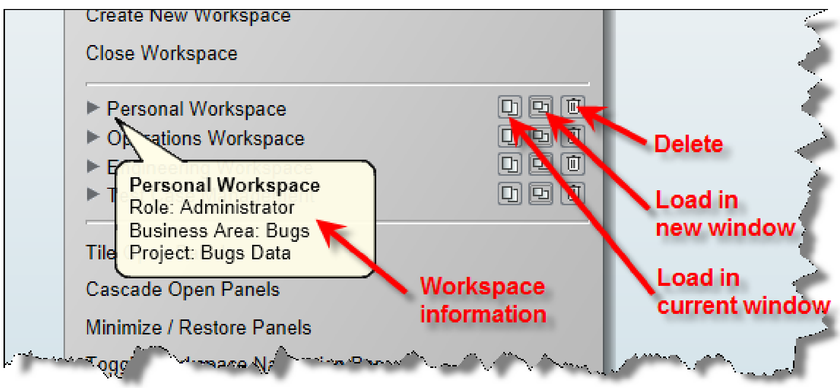


Workspace Menu

- **Drilldown Box**: This is a Search box that allows you to enter either keywords or issue ID's to retrieve matches. The following rules apply:
    - You may enter a single issue ID, or multiple issue ID's. Separate multiple issue ID's with a semi-colon character. If there are no results, ExtraView will attempt to treat the issue ID's as words and look for these as text
    - You may enter any single word or multiple words. ExtraView treats these as Quickfind queries and fetches the results
    - If you start your entry with a # character, then the search can be complex. Please see the Quickfind documentation for full instructions
- A select list that allows you to change your current role
- A select list that allows you to change your current business area and current project
- A link which allows you to save the current workspace. Open panels and their positions are saved. You must provide a title to your saved workspace. If you check the prompt by **Set as your current workspace** then the workspace becomes the one first opened when you enter ExtraView
- A link which allows you to **Save Workspace** under a different name. Open panels and their positions within the current workspace are saved. You must provide a title to your saved workspace. In addition, you may select a different role and/or a different Business Area and

Project for the new workspace. If you check the prompt by **Set as your current workspace** then the workspace becomes the one first opened when you enter ExtraView. You may save the workspace for your own personal use, or save it to be shared as a public workspace. Shared public workspaces are displayed grouped together beneath your personal workspaces. Note that you should not save Quicklist and Detailed reports as part of your workspaces. Their contents are only generated when you drilldown from a query or report. They will result in an empty panel when you load a saved workspace with either a Quicklist or Detailed report

- A link to close your workspace. If you have more than one workspace open, then the browser window containing the workspace is closed for all the secondary workspaces opened after the first one (known as the primary workspace). If you close the primary workspace, you are returned to the standard interface
- A list of all workspaces that you have saved. Each workspace entry has an informative link and three buttons:



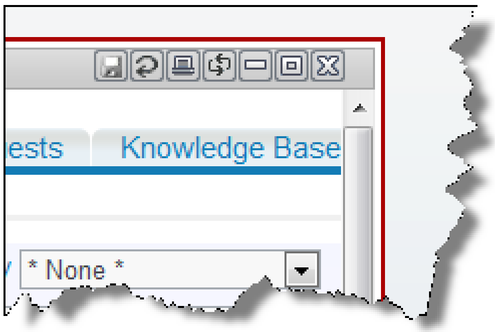
Workspace navigation

Note that if you have set a workspace as the default, its title will appear in bold, and there will not be a delete button. If you want to delete a workspace that has been set as the default, save another workspace as the default once, then delete the original one.

  - If you place your mouse over the arrow at the left of its title, you will see information such as the role, Business Area and Project to which the workspace belongs
  - If you click on the title, or the first button, the workspace is loaded into the current window, replacing the current workspace
  - The second button loads the workspace into a new browser window or tab
  - The third button allows you to delete the workspace
- A link to **Tile Open Panels**. The open panels will be sized so that they are all visible, and occupy the complete area of the browser window
- A link to **Cascade Open Panels**. The panels are arranged from the top left-hand corner down towards the bottom right-hand corner
- The **Minimize / Restore Panels** button will toggle all panels off, and then on again when the link is chosen a second time. When the panels are minimized, you can open any panel from its button on the navigation bar
- A link to **Edit Your Account Details**. When you choose this, you can modify your details, after entering your password
- A link **About ExtraView**. This link will show you copyright information, as well as specific information about the version of ExtraView that you are using

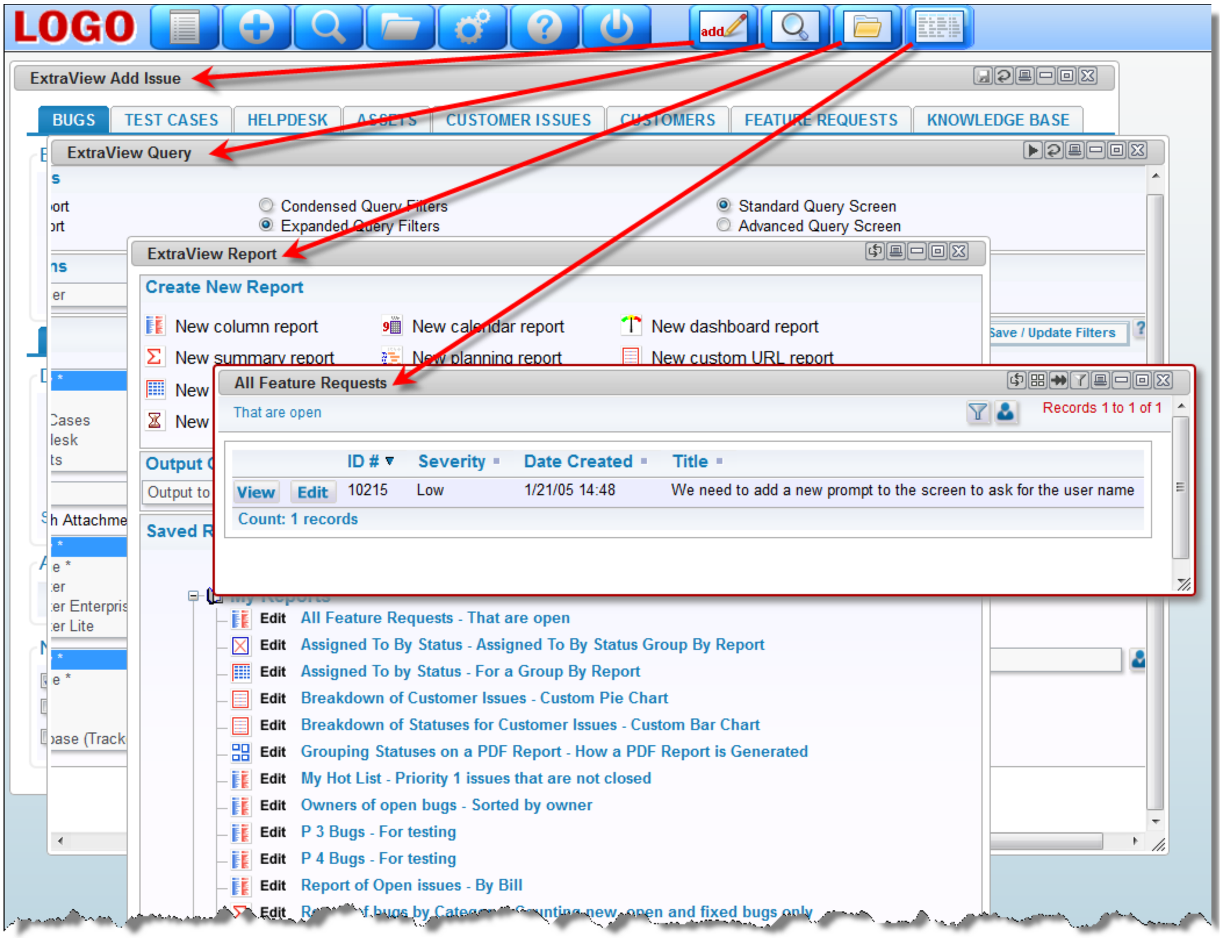
Managing Panels

Each panel that opens will have small icons at the top-right hand corner that perform functions specific to that panel when they are pressed. All panels have icons to minimize, maximize and close the panel. The remaining icons are used to perform tasks such as update, delete, run, etc. All icons have a help tip which is seen by holding your mouse over the button.



Managing workspace panels

Each open panel has a corresponding icon placed in the navigation bar, to the right of the main navigation bar icons. At any time, you may click on one of the icons and the panel to which it corresponds will jump to the front of all other panels. If the panel is out of range of the browser window, the workspace is scrolled so that the panel becomes fully visible. Note that if you place your mouse cursor over an icon, you will see the title of the panel to which it corresponds.



Navigating through open panels

If you double-click on the title bar of a panel, then the panel is maximized, if you double-click again on the title bar, the panel is restored to its original size.

Drag-and-Drop

Workspaces are enabled with drag-and-drop, between panels. This is unlike the standard interface, where drag-and-drop only works within a window. There are specific actions which are allowed with drag-and-drop, and drag-and-drop is not valid between all panels, but only between those which will produce a valid result of a logical action.

Firstly, drag-and-drop actions are only valid between specific types of report outputs or edit panels within workspaces. The basic premise is that you can drag one or more issues from a report output panel and drop the issues within another report output panel. When ExtraView sees that the values within the issues being dragged can be changed to match the filters within the panel where the issues are being dropped, the issues being dropped will be updated accordingly.

For example, consider you have two column reports:

- Report A has filters of *Product* = *myProduct* and *Status* = *Open*
- Report B has filters of *Product* = *myProduct* and *Status* = *Fixed*

Using the standard convention with a click of your mouse to select and drag an issue from Report A, and drop the issue on Report B, the *Status* of the issue will be updated to *Fixed*. Reports may have a button in the title bar of the panel that enables the record selector to allow multiple records to be selected for an operation. This button is used for all of these purposes:

- You can drag all the selected issues and drop them on another panel to perform a mass update operation, where all the issues being dropped will take on the values of the filters in the second panel
- You can click the Detailed Report button to obtain a report of all the selected issues
- You can click the Group Issues button to place the selected issues within a relationship group
- You can perform a Mass Update of the issues
- You can export the selected issues

When you drag a number of selected issues you will see an indication of the number of issues being dragged, and when you drop the issues on a different panel, the mass update utility is invoked to perform updates on all the issues being dropped, to match the values of the filters in the panel where the issues have been dropped. In the same way that you may decide to inhibit the sending of email notification upon a mass update operation, you are given the same choice when dropping a number of issue, to either send or not send email notification.

You may only initiate one drag-and-drop operation at one time, and although you can perform other actions such as run reports and update issues, you must let the updates from the drag-and-drop action complete before beginning another drag-and-drop.

This table shows the valid drag-and-drop operations between report types. If the report type is not in the table, then drag-and-drop actions are not supported at this time to reports within their panels.

	Column Report	Summary Report	Matrix Reports	Quicklist Report
Column Report	✓	✓ [1]	✓ [2]	✓
Summary Report	✓	✓ [1]	✓ [2]	✓
Matrix Report	✓	✓ [1]	✓ [2]	✓
Quicklist Report	✓	✓ [1]	✓ [2]	✓

1. When you drop one or more issues on a summary report, you must drop the issues on a row within the report. This report helps define the target filters for the drop, with the issue assuming the values of each of the fields in the columns that define the summary report
2. When you drop one or more issues on a matrix report, you must drop the issues within a cell on the report. The field values of the row and the column within the report act as filters for the drop, and are used in addition to overall filter values for the matrix report

Drag-and-Drop and Workflow

Drag-and-drop provides a quick, convenient method to update issues for many purposes. When you drag-and-drop a single issue, you will see a popup window if there are dependencies. For example, if a field becomes required as part of an update, and it does not have any contents when you drop the issue on a report to execute the update, the popup will present the field and will require you to provide a value for the missing field.

However, there are some occasions when dropping an issue will produce an error, and no update is performed:

- When the update encounters a business rule that executes a STOP or an ERROR. On these occasions, you will see the reason for the failed update. Simply *edit* the issue and update through the screen
- When the update encounters a reauthorization or electronic signature request. This update must also be accomplished via an *edit* screen.

Drag-and-Drop and Query Filters

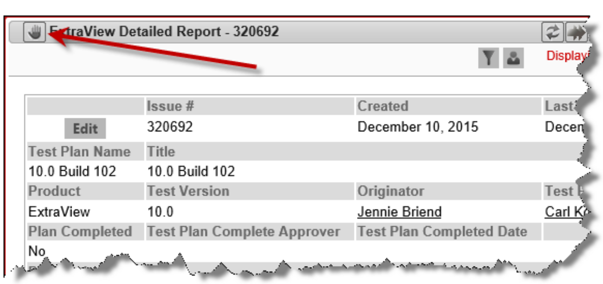
Only AND conjunctions between filters are allowed on the drop area report. all other filters fail when you attempt to drop one or more issues. This is because filters such as OR lead to ambiguous results, in that trying to change a field value to either one value or another makes no sense.

Only EQUAL (=) and IN operators for filter values are supported. Filter operators such as NOT EQUALS (<>) and GREATER THAN (>) are not supported. Again, the use of these operators would lead to ambiguous results in the updates to be applied to the issue or issues being dropped. Multiple values within the IN filter is not supported.

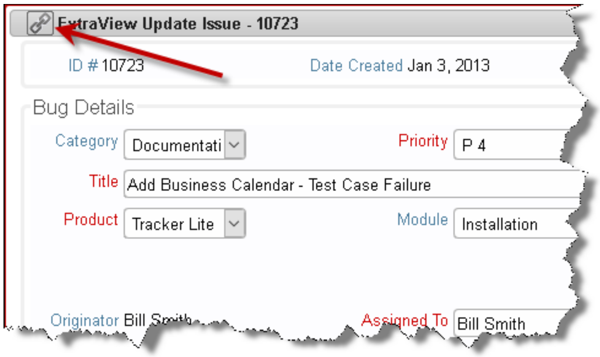
Drag-and-Drop to Relate Issues

There are several convenient places from where you can drag an issue, and drop it onto a related issue display. This implies that the issue being dropped is to be added to the relationship group that forms the related issue display.

- Detailed Reports - There is a button at the top left-hand corner of the screen. The icon depicts a hand which can be dragged and then dropped onto a related issue display to relate the issue within the related issue display to its relationship



- Edit Screens - The button at the top left-hand corner of the screen depicts a hand which can be dragged and then dropped onto a related issue display to relate the issue within the related issue display to its relationship



Drag-and-Drop and Multi-Valued List Fields

When you drop one or more issues onto a drop area which contains fields with filters on one or more multi-select fields, the behavior is as follows:

- If a report is created where the filter criteria includes the multi-valued field, with the opeartor "=" and a single value is selected, the filter shall be used to *add* the selected value to the multi-valued field. For example, if the issue has a multi-valued list field named **FRUIT**, with the values **apple**, **orange** and **pear**, and **apple** is selected, when you drop the issue onto the report where the filter criteria is **FRUIT = orange**, the result will be that the updated issue will have both **apple** and **orange** within the field
- If a multi-valued field is one of the axes of a matrix report, and you drag an issue into a cell specifying one particular value of the field, the issue is updated to *add* the value to the multi-valued field. Existing values in the field are left untouched. Using the same field explained in the previous bullet as an example, when you drop an issue with the value of **apple** onto a cell where the value is **orange**, the updated issue will have both **apple** and **orange** within the field
- If a report is created where the filter criteria includes the multi-valued field, with the operator **IN** and multiple values are selected, the filter is discarded for the update to the issue. For example, if the filter criteria is **FRUIT IN apple, orange** the **FRUIT** field is not used for the update
- If a report is created where the filter criteria includes multiple instances of the multi-valued field, and where the operator is "=" and the filter criteria use **AND** as the conjunction, the filter is used in the update, and all values will be added to the field within the issue. For example, if the issue has **apple** selected, and you drop it onto the report where the filter criteria is **FRUIT = orange AND FRUIT = pear**, then the issue is updated to have **apple**, **orange** and **pear** all selected in the field.

In summary, updates via drag-and-drop to multi-valued fields never remove values from the list, and handle all filter criteria in a manner consistent with normal single-valued list fields.

Drag-and-Drop and Repeating Rows

Repeating row fields may be part of the filters in the drop area for a drag-and-drop operation. The following rules are observed:

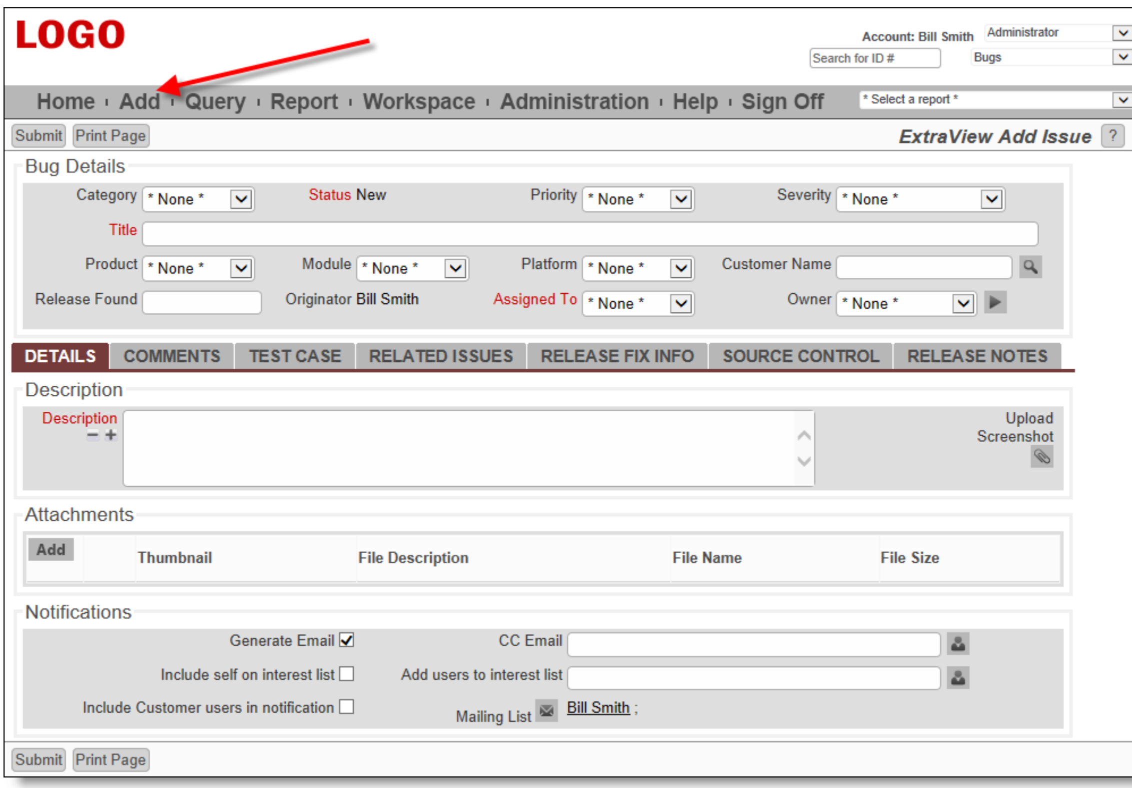
1. There must be only one repeating row displayed on the destination issue, and a single value within the field. If this were not the case, ExtraView could not tell which value was to be

given to the issue being dropped. An error is given, and the drop operation fails if this rule is contravened

2. If a field's filter value in the drop area is different from the value in the issue, the issue in the drop area is used to update the value of the field being dropped
3. If a repeating row does not exist in the issue being dropped, but exists in the issue within the drop area, a new repeating row is created within the issue being dropped
4. If a repeating row exists in the issue being dropped, but the field used as a filter does not have any value, the filter field is given the same value as that in the issue in the drop area.

Managing Issues

The *Add* screen allows you to create data related to a specific issue and enter the issue into ExtraView's database. This is normally the main point of entry for the issue tracking process. The screen presented to you has been designed by your system administrator, and may look significantly different from the example shown.



Typical Add Issue screen

To navigate to the screen above, click on the Add button on the ExtraView navigation bar. Note that you will not see the menu bar when you are adding and editing issues, as using these options could cause you to lose any changes you are currently making to the issue.

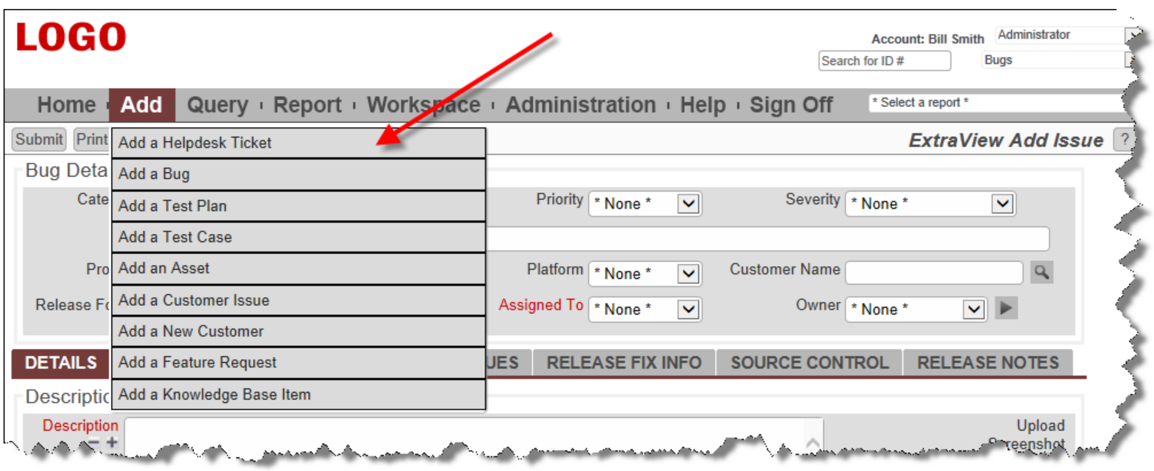
Business Areas

Business Areas may be represented by the tabs at the top of the window or by selecting the Business Areas from the **Add** navigation button, depending on how the administrator set up your system.

The following example screens are configured with the following business areas:

- Bug / Defect tracking
- Helpdesk, including the ability to track the assets assigned to people who use the helpdesk
- Test Case Management
- Customer Support, including the ability to manage Customers
- Feature Requests
- Knowledgebase which can publish issues created in any of the above areas, or issues to publish can be entered directly

Navigation Bar Selection



Tab Selection

Managing issues and items in all these areas is similar. The next section gives examples of the different types of fields you will see through the different business areas.

Filling out fields

- Not all fields may need to be filled in – only the fields where the labels are in bold are required. In some installations, your administrator will have decided on a different method to

highlight required fields, such as using a different color. The above screen uses red color to signify a field is required
- Embedded layouts may have been designed into your site. If your installation uses embedded layouts, this will be evident in that some portion of the screen may change when you select a value in a key field. For example, if you have a field named Category, and you have several possible categories such as Hardware, Software and Documentation, the following fields on the screen may be dependent on the selection. If you have required fields on different layouts, and you try to submit an issue where required information is missing from one or more of these embedded layouts, ExtraView will inform you with a combination of the layout name plus the specific field name of the required value that must be filled in
- When you select a field, the screen form (or parts of the screen form) may refresh. When this happens, ExtraView is retrieving dependent information, to populate other fields on the screen. For example, when you select a *product*, a field name *module* may be refreshed, giving you the valid (and only the valid) list of modules for the product chosen. Another example may be that when you choose a module, ExtraView may retrieve the owner of the module within the system, so the issue can be assigned to them. You cannot make further entries to the ExtraView screen form while the screen is being refreshed
- Other validations may take place for fields that you enter. For example, numeric and date fields will be checked, and validation that is more sophisticated may take place, according to how your administrator set up your site
- Assuming your administrator has enabled ExtraView's built-in spell checker, misspelled words will be underlined in red and the user will be able to correct the spelling by right-clicking on the word and choosing the correction from the list offered. With permission the user may also add new words to the dictionary.

Field Types

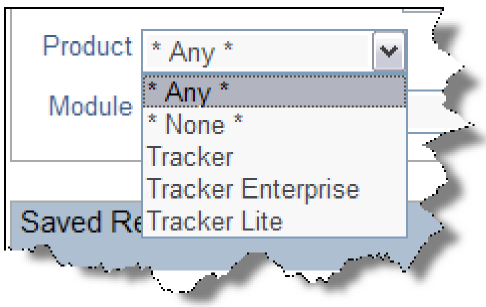
Tab Fields

Example of a tab field

Tab fields typically segment the screen into separate areas, above and below. In general, the contents of the screen beneath a tab field will alter when you click on an entry in the field. For example, when you visit either the *Add* or the *Edit* screen, there may be sets of tabs. The screenshot in the example allows you to choose different business areas within ExtraView. When you click on any of these tabs, the area of the screen beneath the tabs refreshes with the appropriate fields and values for the data for the tab. One usability feature is that if you have a form within a browser window that is longer than the height of the window, and you choose a different value for the tab, ExtraView will place the new embedded layout to display at the top of the screen, thereby preventing the situation where the new layout may be hidden beneath the bottom of the window.

List fields

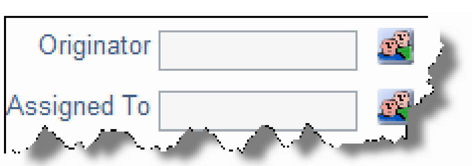
A list field allows you to select a single member of the list, by clicking on the entry you want to select. List fields can be stand-alone, or they can form part of a relationship, where the members of the list either alter the contents of another list (i.e. the field is a parent of another field), or the members of the list are changed by selecting a value in another list (i.e. this field is a child of another field).



Some list fields may not have the value * **None** * in the list. In this case, you are being forced to select a value from the list, whether or not the field is required. The field defaults to the first value in the list which will be selected if you do not choose another value. Some list fields on add and edit screens may have the value * **New** * in the list. This allows you to add a new value into the field, without being an administrator. When you select * **New** * a window pops up, to obtain the values needed for the new entry.

Some list fields may be configured as multi-valued list fields. In this case, the user may select and number of values within the list, by clicking on each one that is being selected. The user simply clicks on a selected value and this will deselect it.

Popup list fields

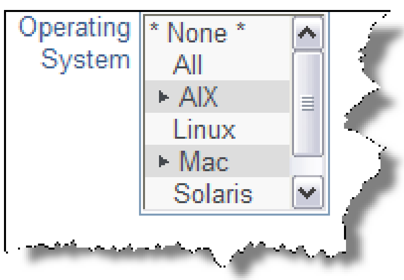


Popup fields are a variant of the List display type field. Popup lists are typically used for large lists where the number of entries makes a standard list difficult to search through, or visually awkward within a browser window.

With a Popup field, you may either type in the entry for the list, or click on the icon beside the text entry box. When you click on the icon, a search window appears, allowing you to perform a wildcard search, or to drill down to the item you want to select. Click on the item to select, and its value will be placed in the field. Popup fields may have been configured by your administrator with an auto-complete function. Auto-complete, or type-ahead as it is sometimes known, works by having one or more characters typed into the list and then automatically presenting you with the most likely matches for the value you are composing. At any time you can select a value from those presented to you by clicking on the value, or you may continue typing in characters until you complete the value. As you type, the values presented in the list are refined to further match your entry.

Popup list fields may be configured as multi-valued popup list fields. In this case, the user may select and number of values within the list.

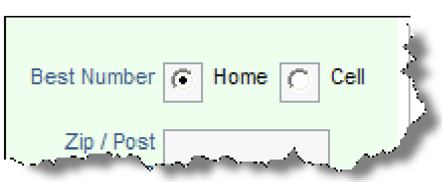
Multi-value list fields



The multi-value field type allows you to select more than one item from a list. For example, the screen below shows two languages can be selected from a list, as indicated by the plus signs. Each item in the list is selected or deselected with a single click of the mouse. If you click on the * **None** * item, then the list is cleared. Note that the arrow character may be another character such as “+”. You may use a single click on a value, and then a shift key plus mouse click on another value in the list in order to be able to select a range of values in a list.

Your administrator may have enabled an option that groups together all the selected items in a multi-valued list. If this is enabled, then the selected values are shown at the top of the list, followed by the non-selected values. The list is automatically resorted when you first display the add or the edit screen, and when the screen refreshes for any reason.

Radio Button fields



Radio buttons have at least two options to choose from. You make the choice by clicking on the appropriate option. Note that the administrator of the site may have set the radio buttons to flow horizontally or vertically on the screen. Your administrator can also alter the presentation of radio buttons, from circular buttons, to square buttons.

Image fields

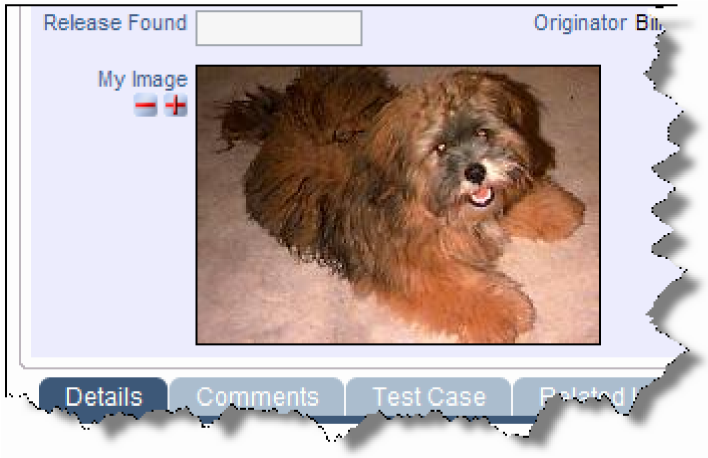
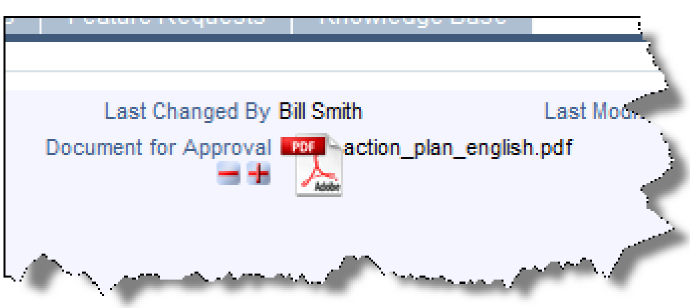


Image fields allow the storage of an image file inline, within an issue. When you click on the button by the field label, a popup allows you to select the image from your computer that you want to store. Images are reduced in size for display on the screen, but you may click on the image at any time to display it in its full size. If your administrator has given you permission, you may also delete the image, using the button. If you want to download an image field, right-click with your mouse, and use the Save-As option in your browser.

Document fields



Document fields allow the storage of a document file inline, within an issue. When you click on the button by the field label, a popup allows you to select the document from your computer that you want to store. Documents are shown with an icon representing its type, for example a spreadsheet or an Adobe Acrobat document. You will also see the file name of the document. To view the document, simply click on the icon or on its filename. If your administrator has given you permission, you may also delete the document, using the button. If you want to download a document field, right-click with your mouse, and use the Save-As option in your browser.

Date and Day fields

Day Calendar Popup

Date Calendar

All date fields will have an adjacent “calendar" icon. Clicking this will activate a popup a window as shown below, so that you can navigate to the correct year and month, and then click on the day you want to select. The difference between Date and Day fields is that Date fields store the time as well as the date, and all Dates are corrected for a user’s personal time zone setting. Day fields are

Popup with time	absolute, and are not corrected for the user's time zone. Also, they do not have a time component.

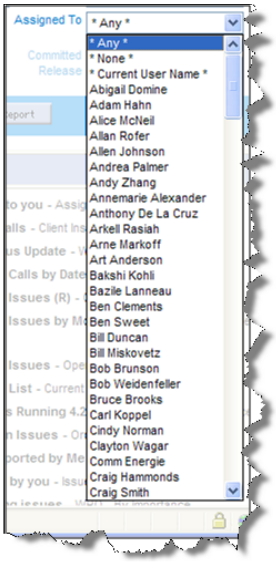
Number, currency and decimal fields

These all store numbers of various forms, but with slight variations. Numbers are generally used for numbers where high precision is not needed. Currency fields may display the currency symbol, and thousands separators in any of the world's currencies, as set up by your administrator. Decimal fields are set up to store numbers where there may be a large number of decimal places, and where it is important to not lose precision. All number fields can be totaled on column reports.

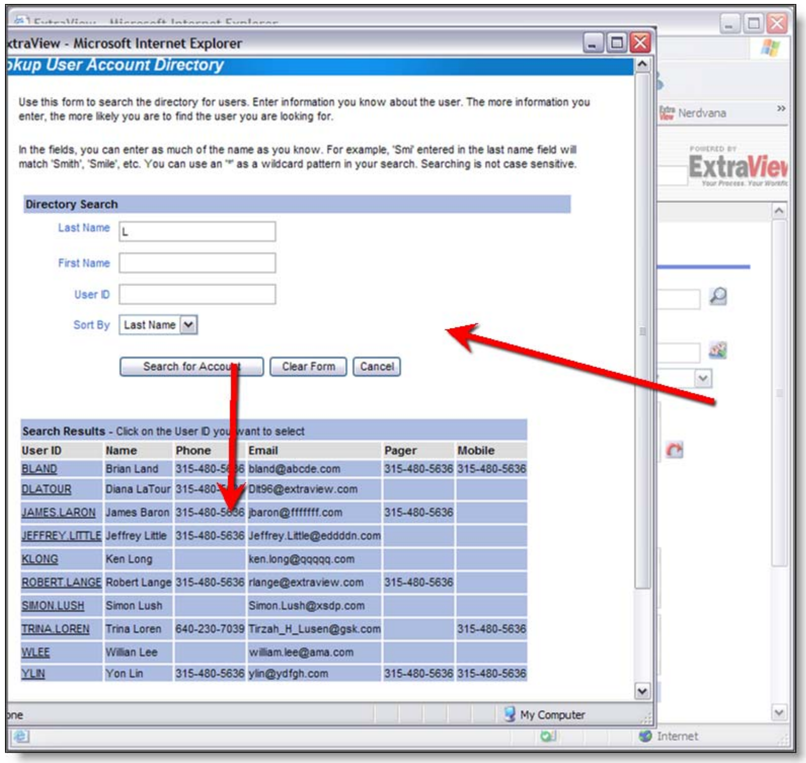
User name fields

User name fields can exist in several basic forms:

- As a drop-down select list, where you click on the name in the list to select it
- In a pop-up select list, where ExtraView presents a list of users in a pop-up box, allowing you to drill down into the list to find the user you are looking for
- Select lists may also be configured with an auto-complete option. The drop-down select lists are typically used when the list of names you are searching is of a modest number, pop-up lists can be used to search through thousands of users in an efficient manner. Auto-complete, or type-ahead as it is sometimes known, works by having one or more characters typed into the list and then automatically presenting you with the most likely matches for the value you are composing. At any time you can select a value from those presented to you by clicking on the value, or you may continue typing in characters until you complete the value. As you type, the values presented in the list are refined to further match your entry.
  Note: If your installation is configured to use an LDAP connection with the behavior setting named LDAP_USER_LOOKUP having a value of YES, when auto-complete is configured, only users that are currently stored within ExtraView are returned with auto-complete, as opposed to all potential users in the LDAP server. This prevents a potential performance issue, returning a huge number of records from the LDAP server to ExtraView, whenever a user presses a single key
- If the user field has a "user list" icon, clicking this will activate the popup window. This presents a search screen where you can find the name of the user. Searching may be accomplished by knowing all or part of the Last Name, First Name or User ID. Enter as much of the name as you know, and press the **Search for Account** button. The window will refresh, showing the names of all the users who match the information you offered. You can use a '*' as a wildcard within your search pattern. When you see the details of the user you are searching for in the pop-up select list, click on the User ID and the name will be populated back into the screen from which you commenced the search.



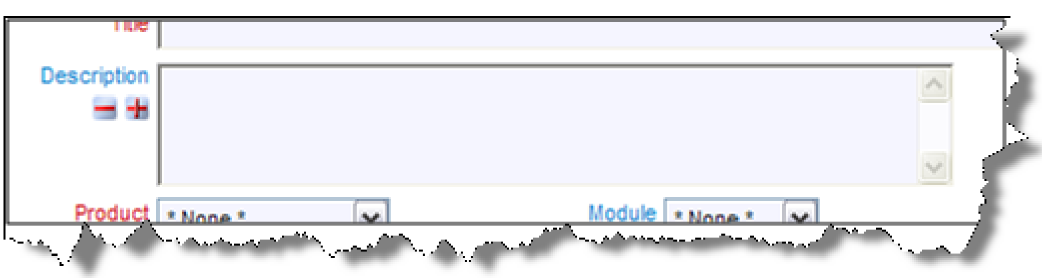
Drop-down select list



Pop-up select list

Text fields

A blank field value on input is considered as the same as 'null' or no input, and will be so treated. For example, a single blank value is not permitted in a required field. Trailing and leading blanks are significant when adding or updating and issue, and are stored in the database as they are entered. However, you cannot search for these rows using equality on the text field. Keyword search strings are always trimmed of leading and trailing spaces. Hence, entering "abc" into a field will effectively render that field non-searchable using that text field as a filter. Tab characters are filtered from text fields. Each tab character is replaced with a space character. Text fields and log fields (text fields that retains previous text, and add a date and time stamp to previous entries) have two small icons and beneath their label. These allow you to shrink and grow the length of the text box, giving you a smaller or larger area in which to enter text.



Text Field

If your administrator has configured the option, when you have reached the bottom row of the text field, the field will automatically expand, offering you more space in which to enter and edit text. The text will continue to expand until the preset maximum height is reached. A special property of text field is that if you enter a URL into the field, then when the field is rendered on a report, or the field is rendered in a read-only mode, then the URL becomes a hyperlink to the URL. For example, if you enter **http://www.mycompany.com** or **www.mycompany.com** into a text field, then it will appear as **http://www.mycompany.com** or **www.mycompany.com** on a report, and if you click the text, a new window will open at the address of the URL. This behavior is extended one step further. Assuming that the title for the ID field in your instance is **ID #**, then entering **ID # 12345** into a text field, will provide a link on reports and read-only versions of the field, to the detailed report view of the issue with the ID of 12345. If the title to the ID field is **Report Number**, then you would enter **Report Number 12345** for the same effect.

Comments fields

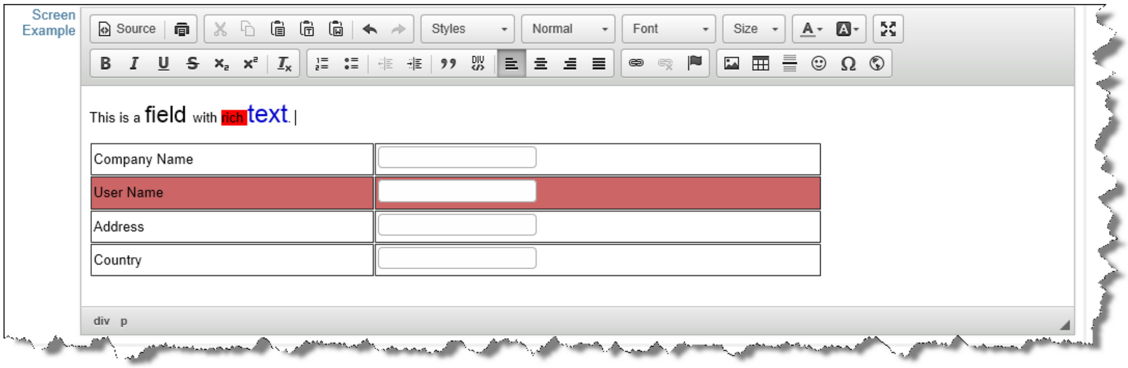
Comments (aka log area) fields are similar to text fields, with a single, important difference. You may only add new comments to a field; you cannot change an existing comment. In this way, you can instantly see on the screen a log of text being accumulated as an issue is processed. Along with each entry you will see a timestamp and the user's name that made the comment. When you are adding a new issue, there are no preexisting comments therefore the field looks identical to a text field. If your administrator has configured the option, when you have reached the bottom row of the comment field, the field will automatically expand, offering you more space in which to enter and edit text. The text will continue to expand until the preset maximum height is reached.

When an issue has existing comments, small arrows appear by the user name and timestamp of the first comment. Use these arrows to sort and resort the comments.

A special property of text field is that if you enter a URL into the field, then when the field is rendered on a report, or the field is rendered in a read-only mode, then the URL becomes a hyperlink to the URL. For example, if you enter **http://www.mycompany.com** into a text field, then it will appear as **http://www.mycompany.com** on a report, and if you click the text, a new window will open at the address of the URL. This behavior is extended one step further. Assuming that the title for the ID field in your instance is **ID #**, then entering **ID # 12345** into a text field, will provide a link on reports and read-only versions of the field, to the detailed report view of the issue with the ID of 12345. If the title to the ID field is **Report Number**, then you would enter **Report Number 12345** for the same effect.

HTML AREA fields

Your administrator may have configured a field on a screen to accept rich text / HTML as it will be rendered on reports. This field type looks like this on the screen:

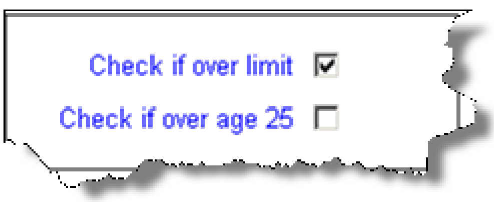


HTML Area field

The HTML Area utility makes use of scripts that run within the browser, and according to the security settings of your browser, you may need to acknowledge that it is OK to run these scripts. For full information on how to use the HTML Area field type, please see Appendix B to this guide.

Checkbox fields

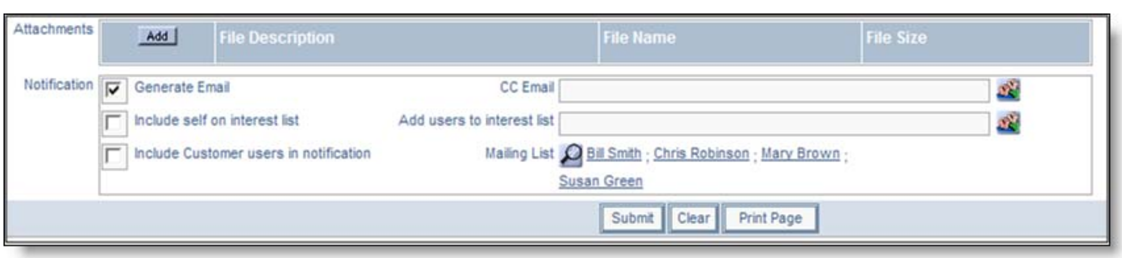
Checkbox fields are set with a single click of the mouse. When set, a tick mark shows in the box, when not set, the box is empty.



Example checkbox fields

Email notification

You will receive an email after you add the issue, unless you have disabled this option in your personal option screen.



Email Notification section of the Add and Edit screens

Others, whose names appear in the user name fields, such as owner and assigned to, will receive email notification. You may join the interest list for the issue by clicking on the checkbox with the label **Include self on interest list**. With permission granted by the administrator, you may also add others to an interest list for this issue. You can also enter other email addresses in the **CC Email** field for copies of the notification to be sent to those people. These people need not be ExtraView users as long as your organization has the appropriate license for its ExtraView software.

Linked fields

If any of the fields on the screen have a link icon, the button will link to another site, application or window within ExtraView, based on the value you enter in the field or the item you select from the list and as set up by your administrator

Repeating record fields

Some fields or groups of fields are termed as repeating fields.

If a field is repeating, there will be a button, beneath the group of fields with a label such as **Add another Release record** or **Add another Version record**. Pressing this button allows you to add an additional value or values for the field. When you click this button, a new entry row for the repeating field(s) opens on the screen. This is typically used to break an issue into sub-issues, or to add a number of dependent data items to an issue.

Note: You may see a completely different set of fields in your installation, depending on how your system was implemented.

Workflow Process and the Status Field

This field is important in most installations of ExtraView, and special rules may apply to how it functions. For example, your administrator may have determined that issues may only be moved in a particular pattern, or workflow. The administrator may also have decided that these workflow status rules are different for different user roles within your organization. For example, these are valid rules:

- Engineers may open and fix issues, but they may not close them.
- QA personnel may open and close issues, but they may not fix them.
- Administrators may do anything

The status field may appear with different entries at different points within the process. For example, on the Add Issue screen, there may only be a status of new, whereas on the Edit Issue screen, there may be some combination of open, fixed and closed, depending on your role. ExtraView makes certain that users follow the process required. The status field may appear as a normal list field, or may appear as shown in the following screen shot, where a more graphical representation is used to show the status list to which you are allowed to move the issue.

Alternative Status display

Allowed Values

When you select a value from a list, the form may bring back data that is dependent on the selected value. For example, if you select a field named *Product*, then a list in a *Module* field may be refreshed, showing only the valid entries for the *Product* selected. These are termed Allowed Value Lists and are maintained by the administrator.

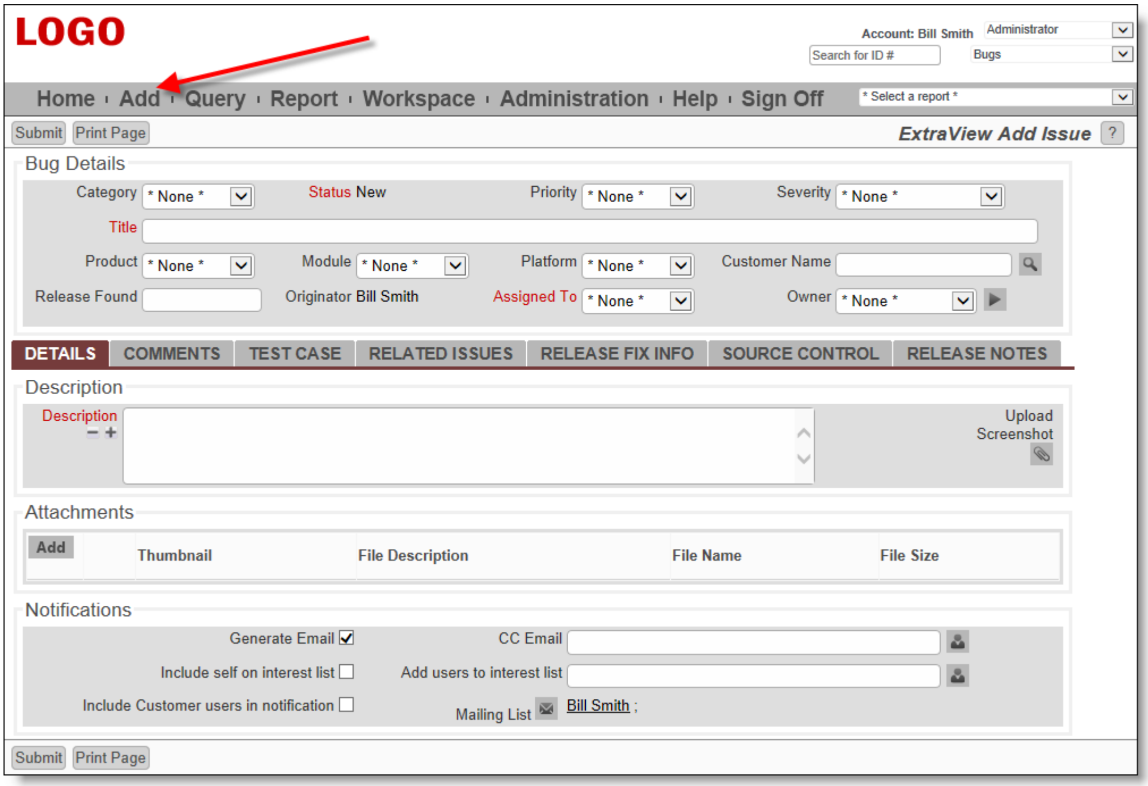
Allowed value lists are an efficient mechanism to make certain that you can only add valid data to a form. In the case just defined, the *Product* field is termed the **parent** and the *Module* field is termed the **child**. The parent and child fields may not be select lists. They may also be selection tabs across the screen, or they may be pop-up lists. Pop-up lists are most frequently used when there are a large number of options to choose from, and some searching for the value may need to take place.

Allowed value lists may be chained together. You might see a chain which is termed *grandparent --> parent --> child*. An example might be *Product Family* --> *Product* --> *Component*. When you choose a value for *Product Family*, the *Product* list will only show the members of the *Product Family*. Similarly, when the user chooses a *Product*, the *Component* list will show only the *Components* for the selected *Product.*

Reverse Allowed Values

These are only implemented infrequently by your administrator. In this case, when you encounter an allowed value list combination, all lists are initially popuplated with all values. You choose a value from any of the lists and the other lists are filtered to only show valid entries, whether they are parents or children.

Adding an Issue



Add Issue screen

For the ExtraView *Add* Issue screen pictured above, enter information in the various fields as appropriate, and the click the **Submit** button. The tab field in the center of the screen allows you to enter information into sub-layouts on the screen; each contains information appropriate to the tab you select.

Note: Deselect the **Generate Email** box to disable automatic email generation. Select the name of a desired one-time automatic email recipient in the CC Email field. Click the Mailing List link icon to see the list of all current email recipients. This list will include users who are on an Interest List.

Note: Field names given in bold or highlighted in some other way, are required fields. Also, note that where field dependencies exist, a selection must first be made in the parent field's pick list in order for the child field's metadata to appear.

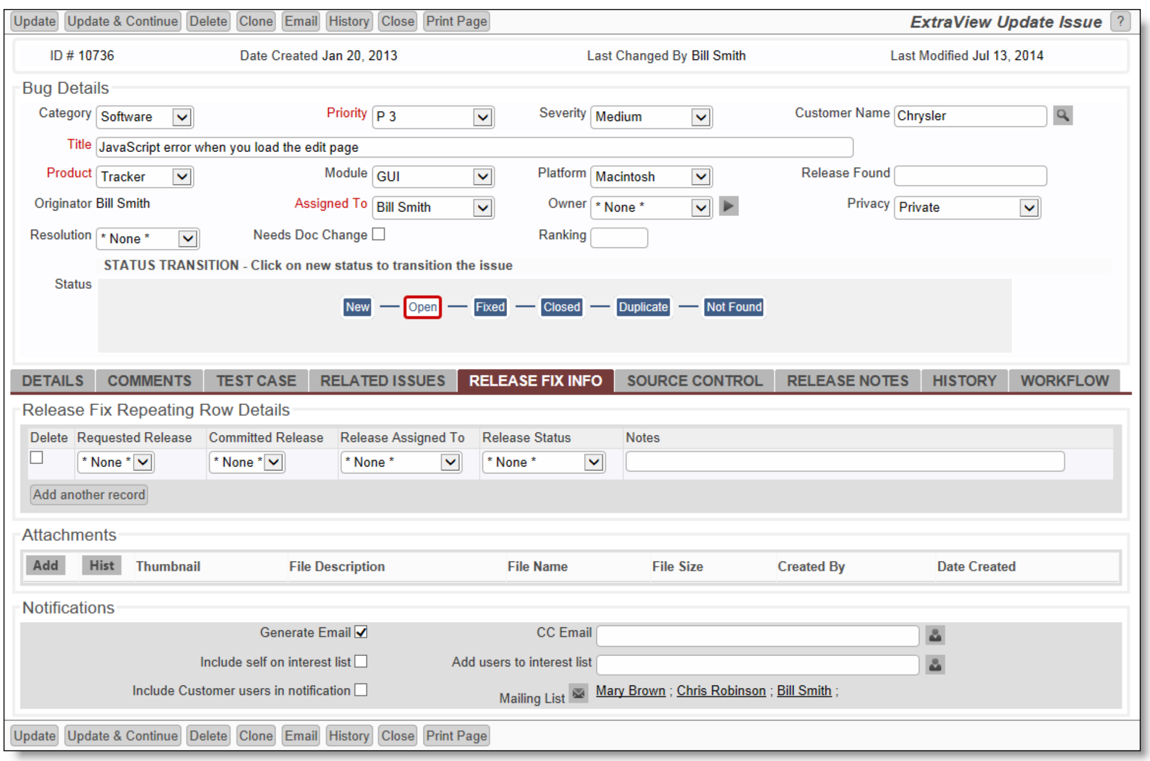
If you click the **Submit** button and errors exist with your data, you will see appropriate alerts, and you can resubmit your issue after correcting the problems.

In most installations, you will see a confirmation screen once you have successfully submitted your issue. This will show you the entry you have made, and again, in most cases, you will be able to edit the issue if you spot any errors or see changes you'd like to make. Note that the confirmation screen does not display the mailing list. If you want to go back and see who was notified of the submission, you can look at the history of the issue.

Editing an Issue

Editing an issue that has been entered into the database allows you to update the status of an issue, change incorrect information or add additional information. Note that the *Edit* screen may look different from the *Add* screen. The administrator is able to design different layouts for each purpose of adding or editing an issue. The *Edit* screen can be accessed from any of the following screen locations:

- Quicklist Report
- Detailed Report
- Summary Report
- Custom Report
- Home Page Reports
- New Issue Summary Screen
- ExtraView Email Notification
- Drill-down box on the navigation bar



Edit Issue screen

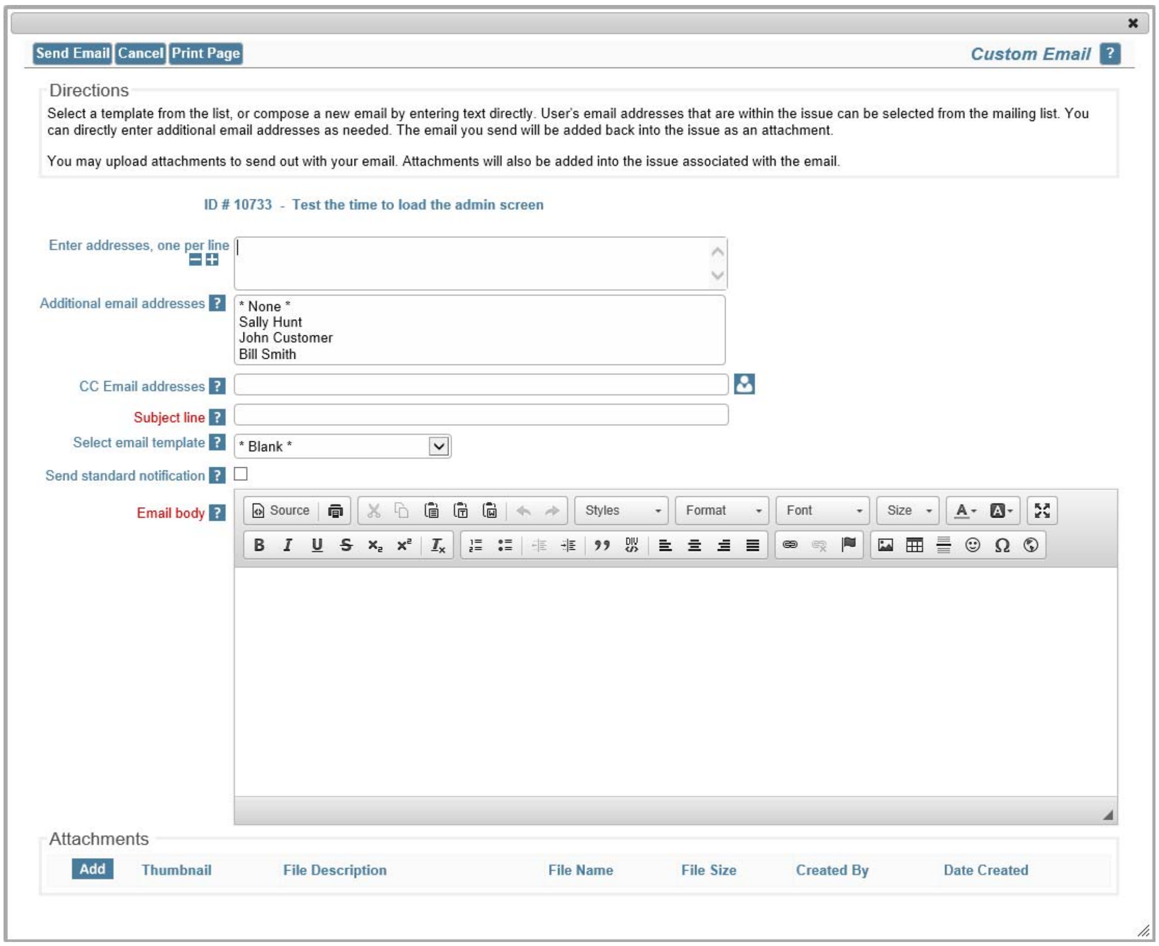
To edit an issue:

- Click on the **Edit** button next to the issue you want to modify. You will see a screen similar to the one above, with data specific to the particular issue
- Make any changes or add any information
- Click the **Update** button. The issue has now been updated, and email notification is sent out to the appropriate parties

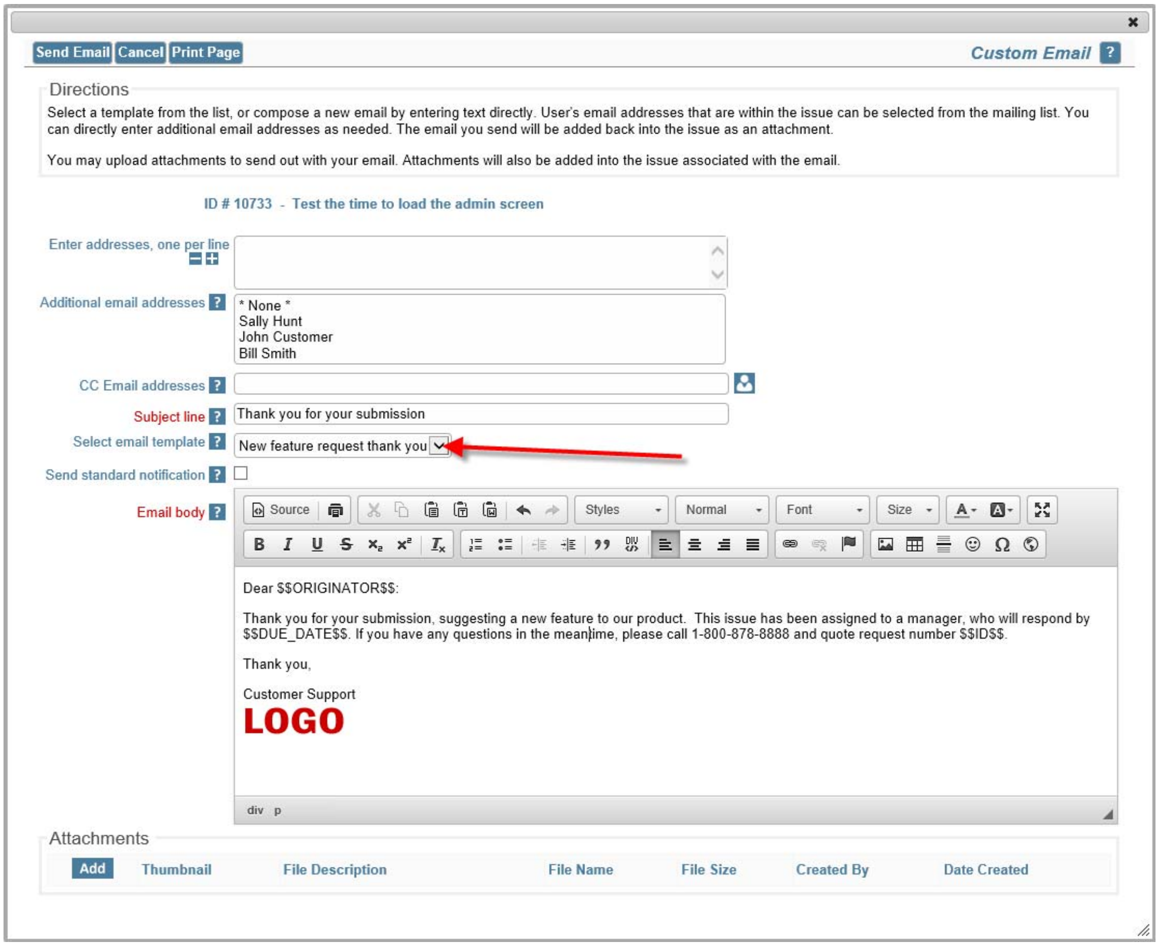
- If your administrator has configured the option, and you are editing an issue by drilling down from a report, then there will be two buttons on the menubar, **Update & Next** and **Update & Prev**. These allow you to move through a list of issues from a report, and to update one, then move to the next or previous issue without going back to the report
- There may also be an **Update & Continue** button. When you click this button, there will be a short delay and you will see the message **Saved** appear on the screen. You may then continue editing the issue.

Sending Email

If your administrator has given you permission, you will be able to send email from the Edit screen, using the Email button on the button bar. This email is different from the standard notification, as you can either choose from a set of prepared templates, or you can compose the email directly on the screen. When you press the Email button on the toolbar of the Edit screen, a screen similar to the following will be shown.



Preparing to send email from the edit screen



Loading a template to send email

If you want to send an email that you compose directly, simply enter an email address (or choose users from the mailing list), enter the subject line and enter the text. You can also enter people for a CC list for the email. When complete, simply press the **Send** button. The email you have just sent is added back into the issue as an attachment, as a record of the communication. Your administrator may have defined a range of templates. These are prepared emails that you can choose within the list entitled **Select saved email template**. If you choose a template, its text will be placed within the template text box. Templates often have tokens defined, such as $$ID$$ or $$DESCRIPTION$$. These will be substituted when the email is sent, using the value of the fields within the issue. For example, $$ID$$ may be replaced with 12345, if 12345 is the issue number. When you select a template, there is a warning if you already have text in the email body, ensuring you only overwrite the body deliberately.

Viewing Issue History

ExtraView retains a record of changes that you make to any issue. You can thus track the history of changes from the time the issue is first entered until it is finally closed. This provides a complete audit trail of all the changes, as a issue is tracked from its creation to its final closure.

- Click on the **Edit** button next to the issue you want to view.
- Click the **History** button at the top of the Edit screen.

- There are four possible styles of History report. Your administrator will have selected which ones are most appropriate for your organization
  - The first style is a simple look at the key status changes, who made them and when they occurred. This is displayed as part of the *edit* screen
  - The second type shows all fields on the record, for each entry. Your administrator will have configured a layout which determines which fields are displayed, and in what order they appear
  - The third style only shows the fields that have altered between successive edits. This is more concise and is most useful if you have a very large number of fields on the screen. This is known as the abbreviated history display
  - The last type is similar to the third style, but within each history entry, the old value is shown alongside the current value. This is known as side-by-side history.

Depending on which of the history methods your administrator allows you to view, there will be a button on the menubar which allows you to view each of the methods with a single mouse-click.

Note: You will see the most recent records first. The changes between successive records are marked in different colors on the screen, allowing you to easily identify the field changes that were made in each edit session. Naturally, all the fields are in a single color on the last record on the report, since every field was new when the issue was entered.

The administrator will have chosen different colors to signify field additions, field value changes and field deletions. The simple history summary is a single read-only field that is displayed on the *edit* screen. This shows the changes in status only, who made the status change, and when the change occurred.

Simple Summary of History

Cancel | Full History | Abbreviated Display | Abbreviated Side-by-Side Display | Print Page

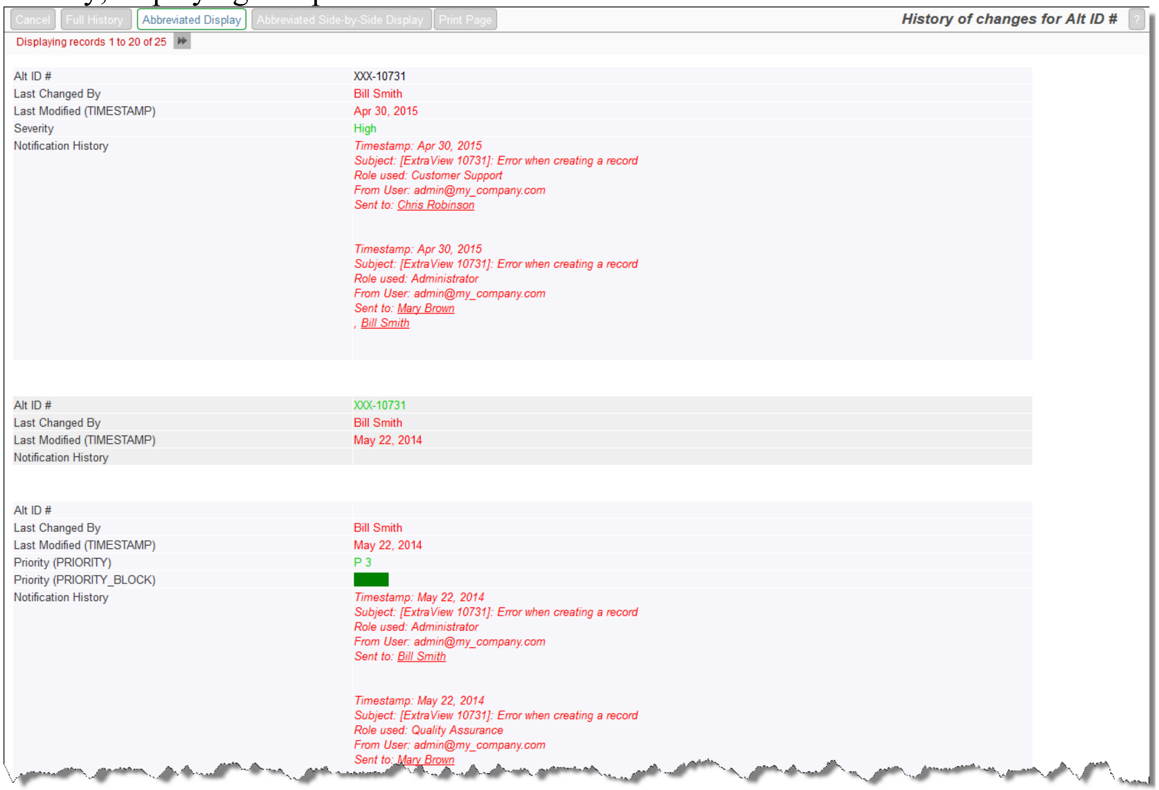
Displaying records 1 to 20 of 25

ID #	**Title**			
10731	Error when creating a record			
Date Created	**Days Created Since**	**Last Modified**	**Days in Status**	**Days Open**
Jan 8, 2013	843	Apr 30, 2015	344	843
Originator	**Last Changed By**	**Assigned To**	**Product**	**Module**
Bill Smith	Bill Smith	Bill Smith	Tracker	Database
Category	**Status**	**Priority**	**Severity**	**Platform**
Software	Open	P 3	High	Solaris
Release Found	**Needs Doc Change**	**Resolution**	**Privacy**	**Customer Name**
	No	Implemented	Private	Bear Inc.
Description				
Add a record and observe log file				
Reproducible	**Occurrence**	**Operating System**	**Test Case**	
No				

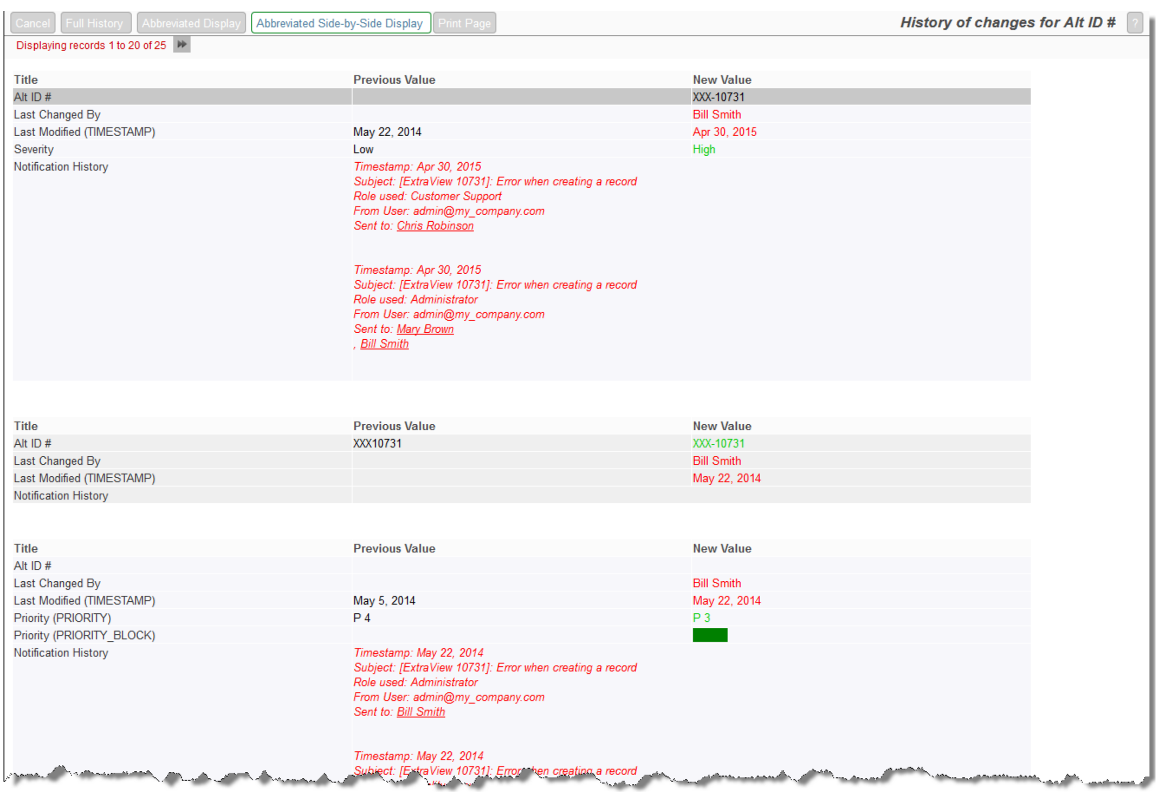
ID #	**Title**			
10731	Error when creating a record			
Date Created	**Days Created Since**	**Last Modified**	**Days in Status**	**Days Open**
Jan 8, 2013	843	May 22, 2014	344	843
Originator	**Last Changed By**	**Assigned To**	**Product**	**Module**
Bill Smith	Bill Smith	Bill Smith	Tracker	Database
Category	**Status**	**Priority**	**Severity**	**Platform**
Software	Open	P 3	Low	Solaris
Release Found	**Needs Doc Change**	**Resolution**	**Privacy**	**Customer Name**
	No	Implemented	Private	Bear Inc.
Description				
Add a record and observe log file				
Reproducible	**Occurrence**	**Operating System**	**Test Case**	
No				

ID #	**Title**			
10731	Error when creating a record			
Date Created	**Days Created Since**	**Last Modified**	**Days in Status**	**Days Open**
Jan 8, 2013	843	May 22, 2014	537	843
Originator	**Last Changed By**	**Assigned To**	**Product**	**Module**
Bill Smith	Bill Smith			

History, displaying complete details



History displaying changes only



Side-by-side History view

Display of Checkbox Values in History

Checkbox fields present a unique challenge within the history of an issue. Despite most people believing checkboxes have 2 values, **Yes** and **No**, there is actually the possibility of interpreting a third value, **Undefined**. This exists if the checkbox has never been set by the user. ExtraView's reporting always display a **Yes** or **No** value for every checkbox, and the user cannot distinguish between **No** and **Undefined** on an *add* or *edit* screen. However, it can be important to distinguish between the **No** and **Undefined** values in the history of an issue. ExtraView uses the following conventions in History for the display of checkbox values:

Full History	For consistency with reports, both **No** and **Undefined** checkbox values are represented with a **No** on the output. When an issue is first created, the **No** value is colored red. From that point, the **No** value is displayed in black, and a green **Yes** will appear when the user checks the box.
Abbreviated History	No entry is displayed for a checkbox when the issue is first created, unless the user checks the checkbox, in which case a red **Yes** will appear on the output. From the point forward where a checkbox value is changed, the new value always appears in green.
Abbreviated Side-by-Side History	No entry is displayed for a checkbox when the issue is first created, unless the user checks the checkbox, in which case a red **Yes** will appear on the output. From the point forward where a checkbox value is changed, the new value always appears in green.

Relationship Groups

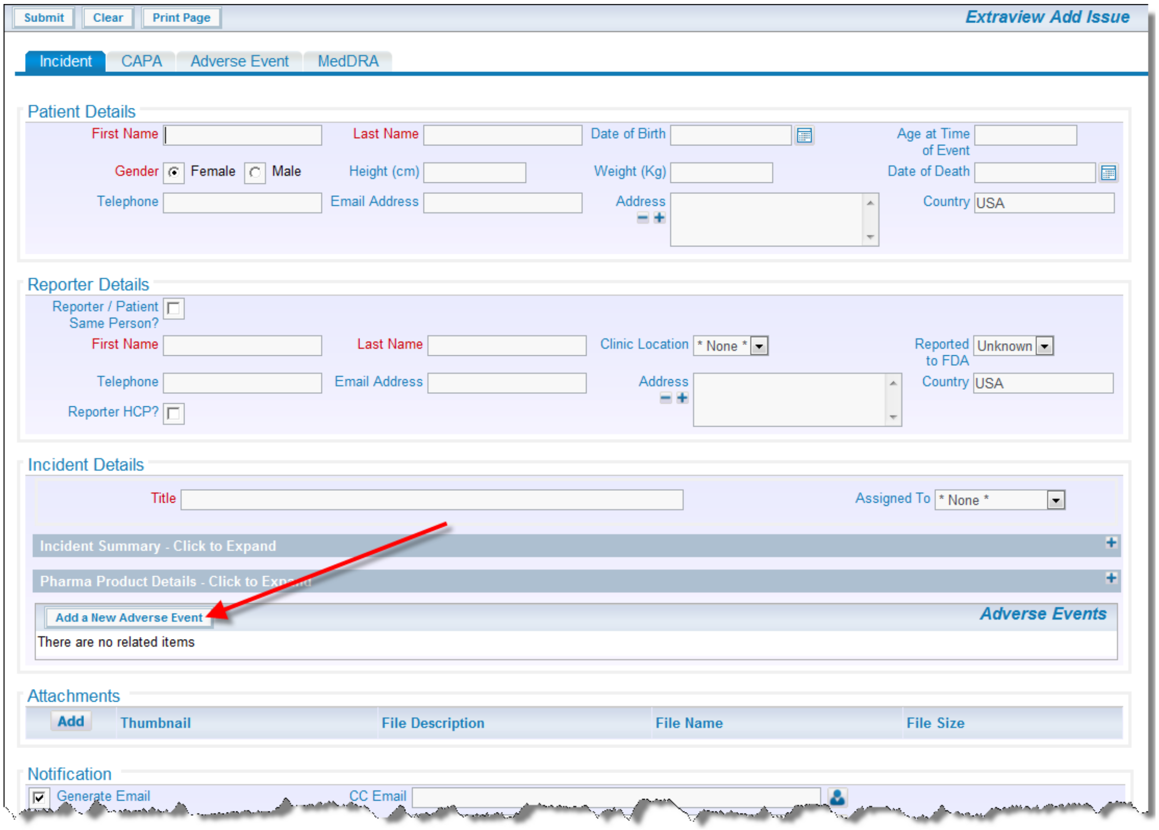
- Add new comment

Each issue in ExtraView may be associated with a Relationship Group. A Relationship Group is a grouping of issues within the system for the purpose of keeping track of similar or related items. There are a number of types of relationship groups that can be utilized within ExtraView. Each type has different characteristics and different methods of operation. Relationship groups may also differ considerably in the user interface that manages them.

There are several ways in which relationship groups, or related issues, can be displayed and managed. Two of these are shown below.

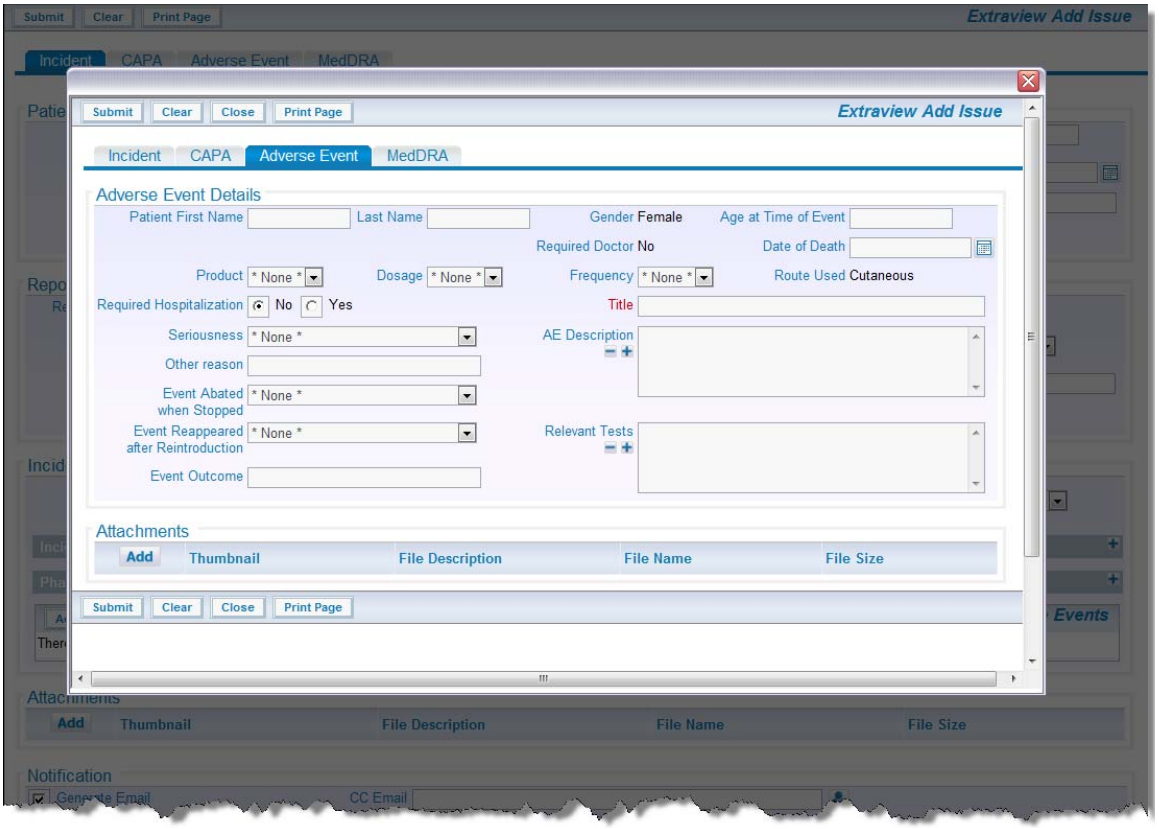
Creating Related Issues from an *Add* or *Edit* Screen

Consider the following *Add* screen:



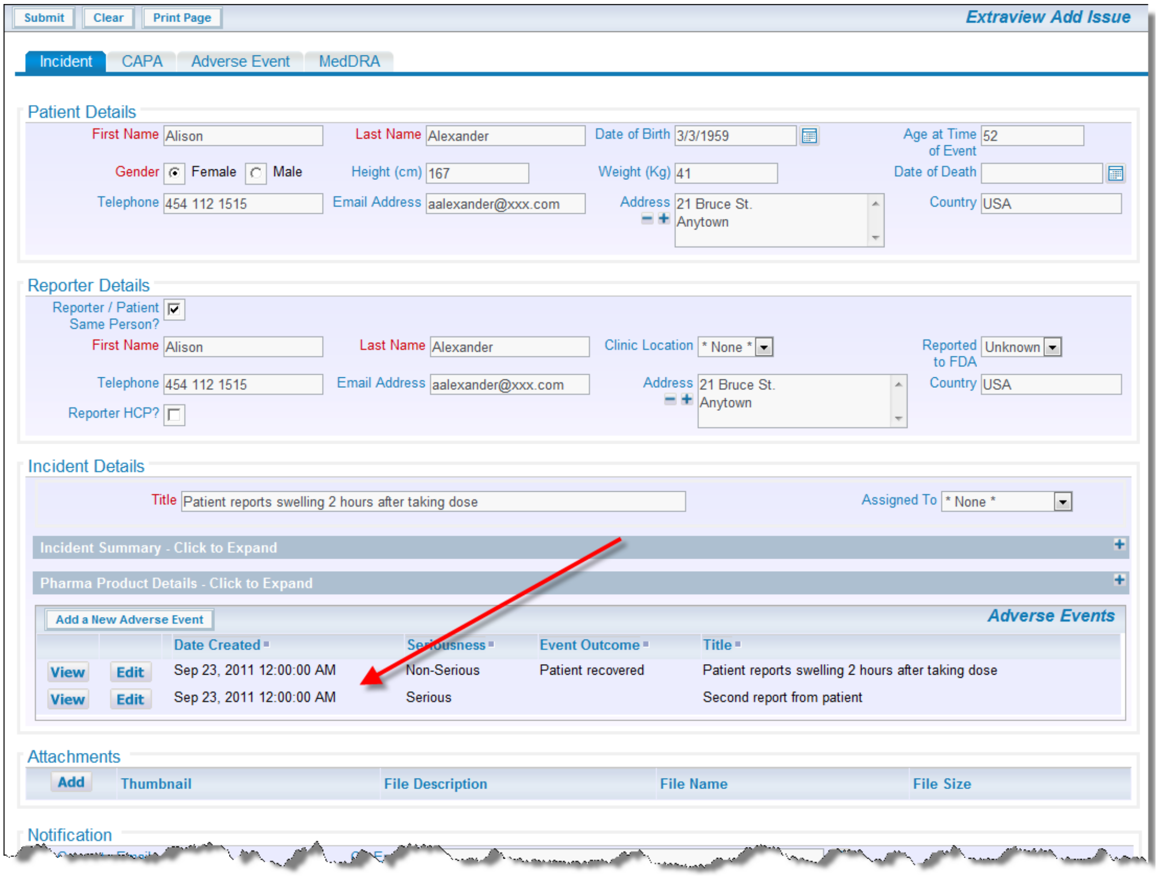
Add screen with a Related Issue Section

When you press the button to add a new related issue (in this case an Adverse Event), you will see a popup window as follows:



Popup to Add the Related Issues

Once you have added data to the *Add* screen and added a couple of related issues, the screen will look like this:



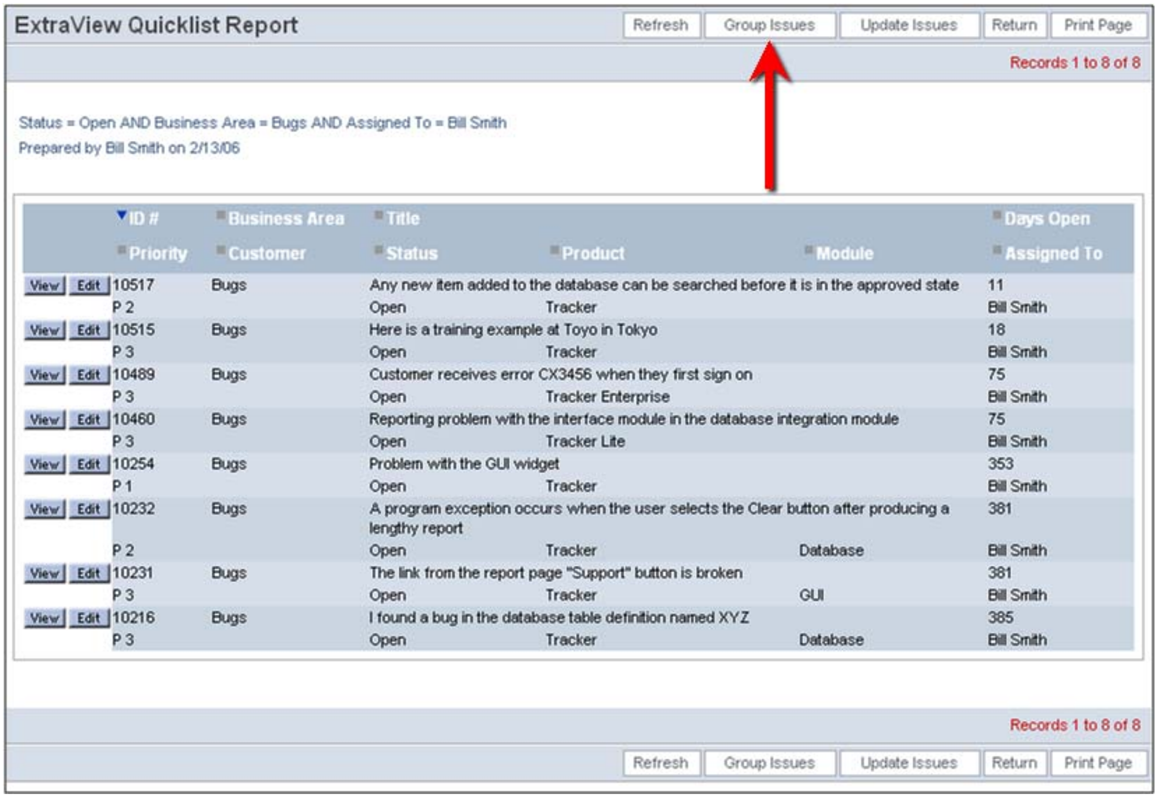
Add screen with related records added

Create or Update a Relationship Group from a Quicklist Report

You may also create new relationship groups, or add issues to existing groups, from the Quicklist report. This has the advantage of allowing you to group issues that have common attributes because of a previous filtered sort. Note that this feature is not turned on in the standard issue tracking installation, as its use will conflict with the previous method of relating issues to each other. Your system administrator will have configured this if appropriate.

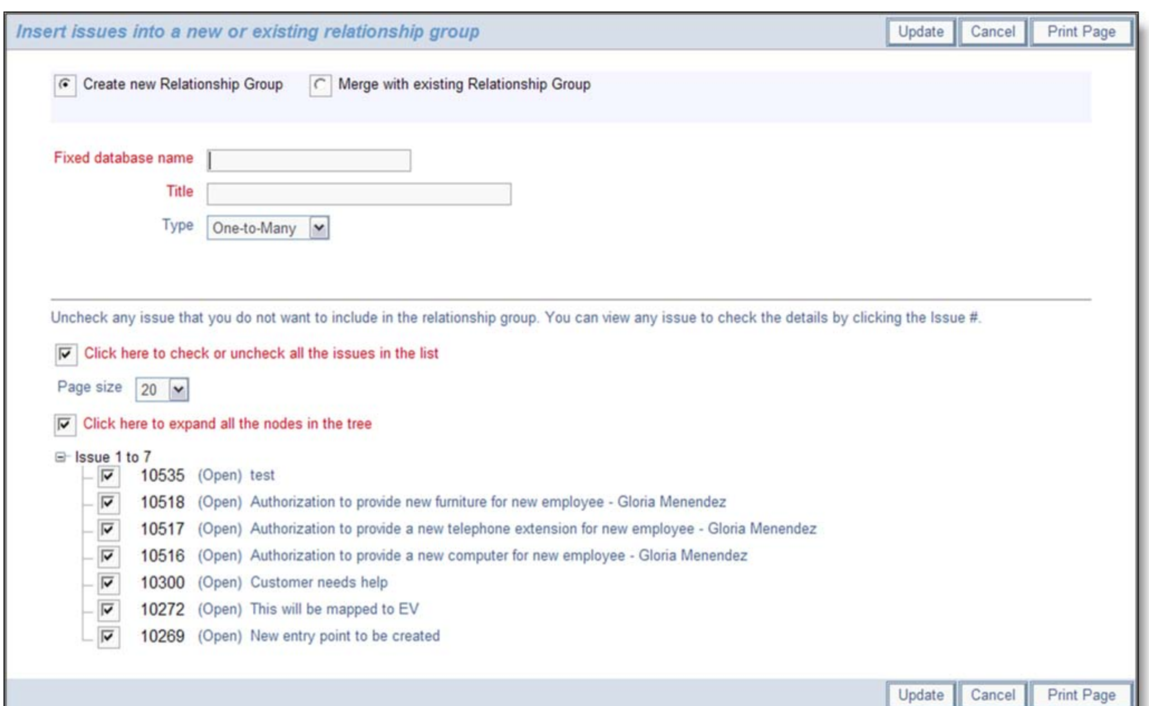
After a search on a particular keyword, you might find that there are multiple variants of the same issue in the system, that these are assigned to different people, and that they are at varying stages of completion. Using relationship groups, you could decide to keep them all *Open* but still group them with the prospect of a common, future resolution. This can be done by producing a Quicklist report, then grouping the issues together.

To Create Groups from Quicklists



Quicklist Report screen

A screen similar to the following appears:

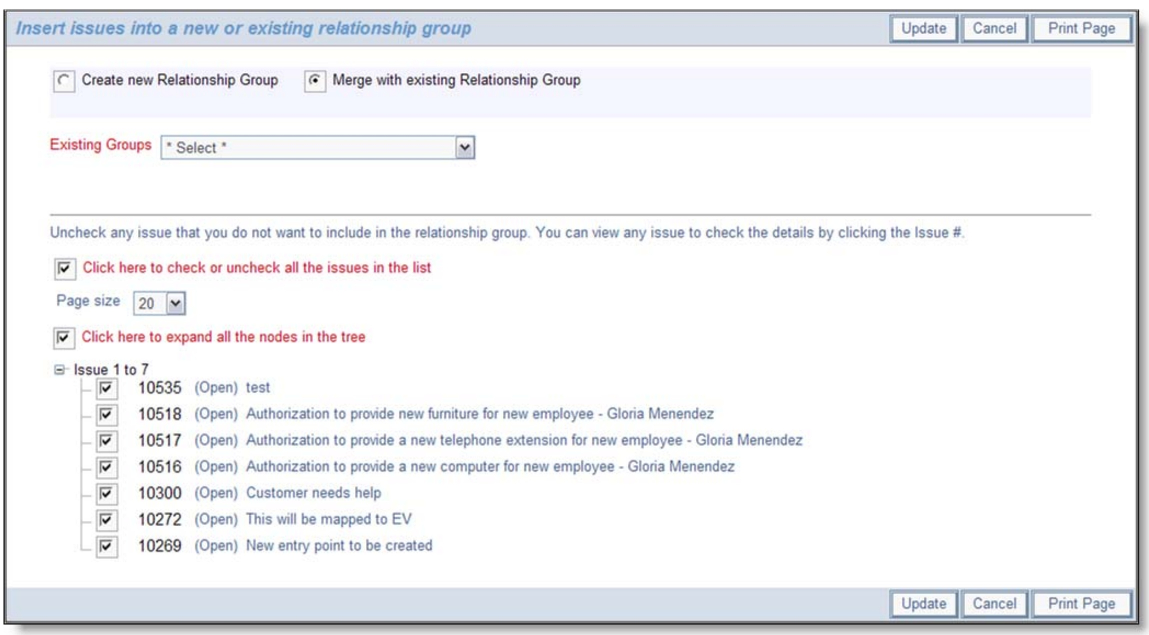


Create a New Relationship Group screen

- Enter a new title for the relationship group, and select the type of relationship group from the dropdown menu. The different types of groups are as follows:
    - **Bi-Level** - This requires that one issue from the group is the parent, or master issue. Rules may apply to the group. For example, you may not be able to *close* the master issue unless all the other issues are already *closed*. This type of relationship group is being deprecated, and you should use one of the other relationship groups. These types are supersets of the bi-level type, therefore you will only gain in functionality
    - **One-to-Many** - This group requires that one issue from the group is the parent, or master issue.
    - **One-to-Many Cascade** - This type is similar to the One-to-Many relationship group type. The difference is that when a user deletes an issue which is the parent of one or more child issues, then the child issues are also deleted, as opposed to leaving orphaned child issues in the database, once the parent is deleted.
    - **Many-to-Many** - This group is a free-structured group where issues may have parents or children in an arbitrary way. This extends so that a child may in itself be the parent or a child of any other issue
- Click the **Update** button to form the group and continue.

To Update Groups with Additional Issues

From the previous screen, click on the **Merge with existing Relationship Group** button.



Adding issues to an existing relationship group

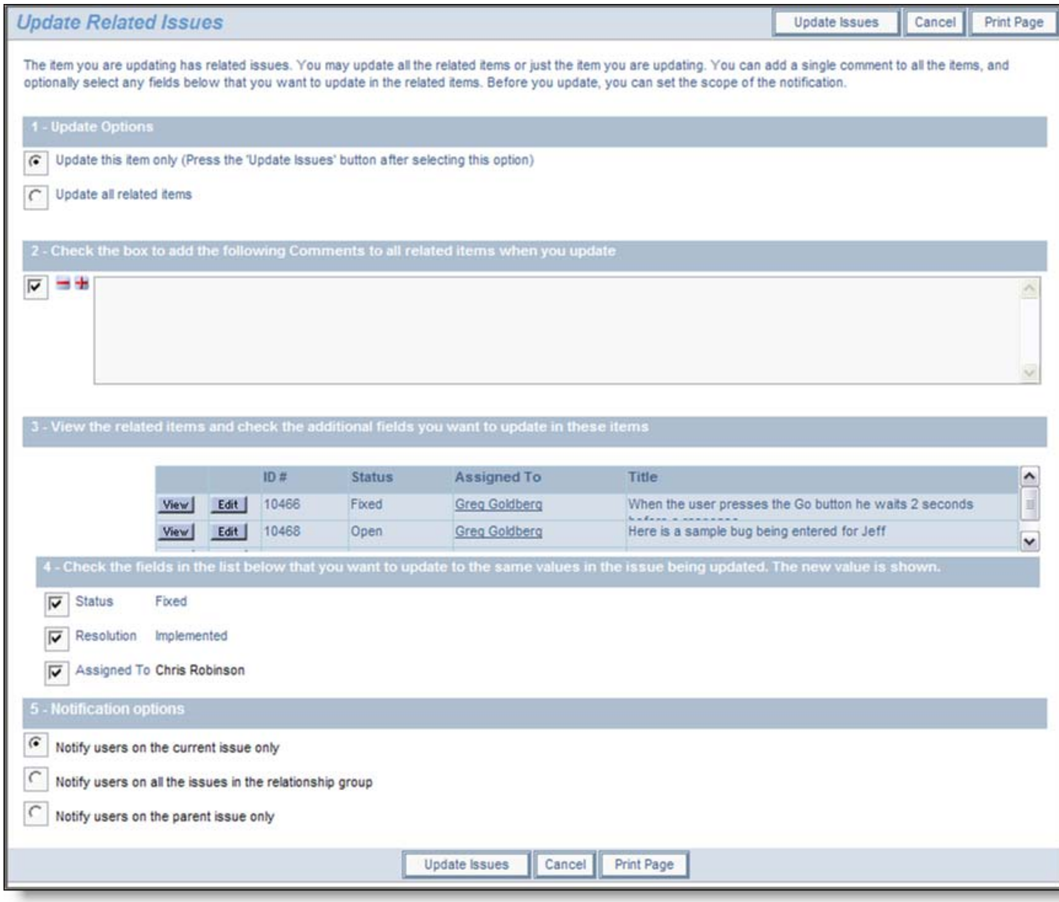
From the list of relationship groups select the existing group to which you want to add the issues. Again, you may alter the list of issues as you update the group.

Update Relationship Group Issues

Once a relationship group has been created, and issues have been associated with it, ExtraView will notify the user of the existence of related issues each time you do a issue update, and give you the opportunity to make batch-level status changes, as needed.

Perform Group Updates

- Edit a given issue as desired, and click the **Update** button.
- If the issue belongs to a relationship group, the following screen appears:



Update Related Issues screen

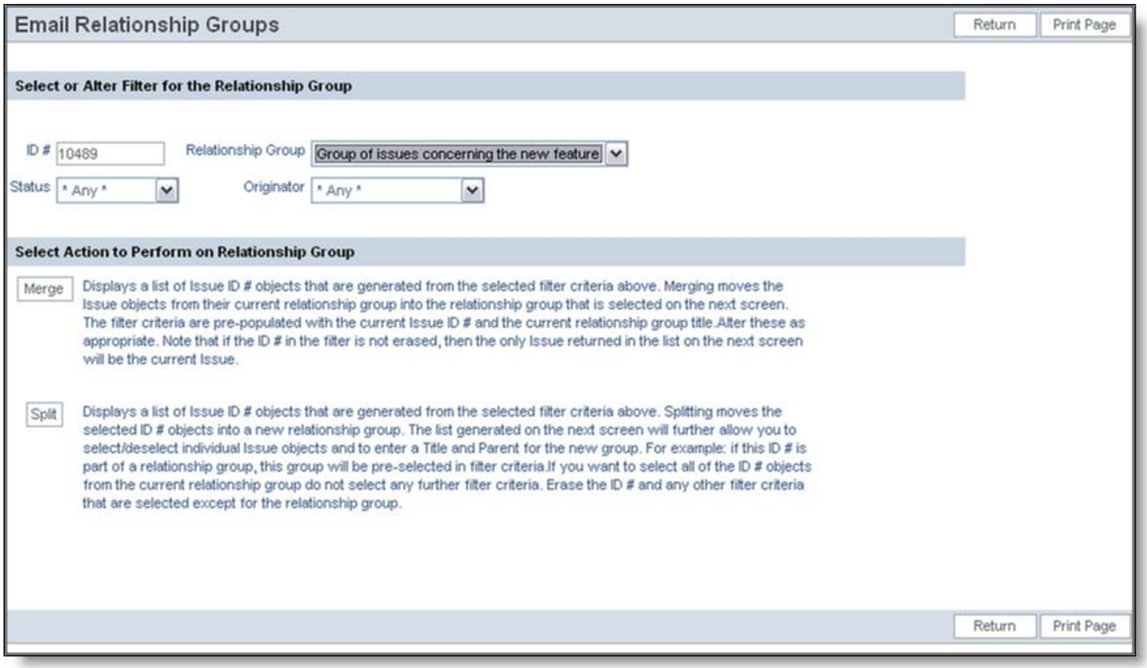
- View related issues as desired, by clicking on the **View** button.
- Check appropriate boxes to update the **status** and/or **resolution** for every issue in the group.
- Enter comments to be automatically added to every issue in the relationship group.
- Click the **Update Issues** button.

Manage Relationship Groups

In addition to the ability to create relationship groups, add issues, and perform batch updates, ExtraView also provides relationship group management features, including merging relationship groups, and splitting relationship groups. Again, your administrator must have configured this option and given you permission to access this feature, before the button appears on the Edit screen.

1. From a given issue’s Edit screen, click the **Manage Relationship Groups** button.

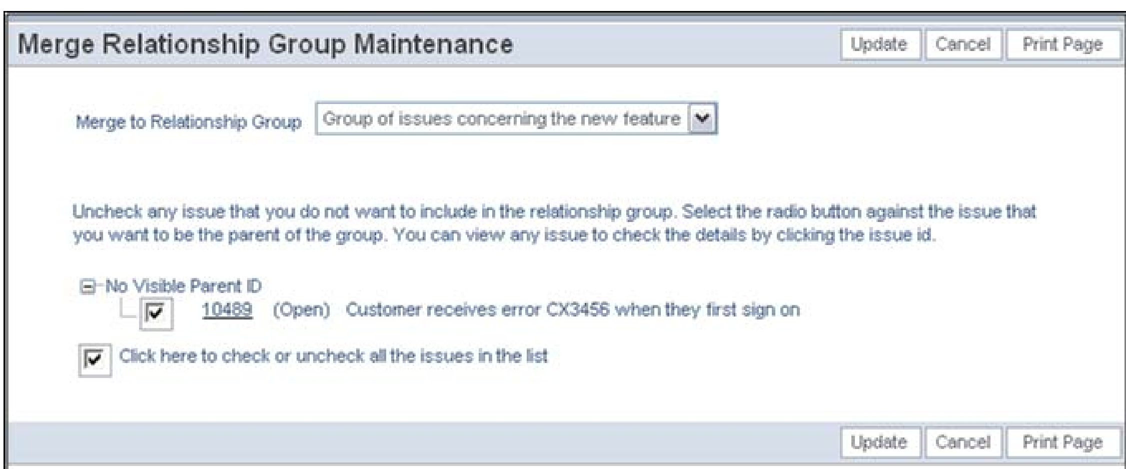
The following screen appears:



Manage Relationship Groups screen

Merge Issues into New Relationship Groups

- To merge a issue from one group into a different group, select filters to return appropriate issues, and click the **Merge** button.
- A screen similar to the following appears:

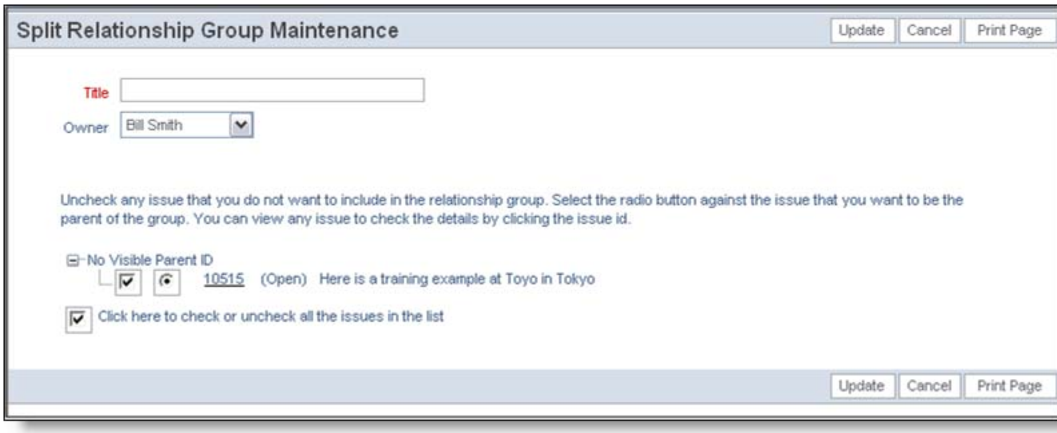


Merge Relationship Groups screen

To merge the issues in the sort result into a new relationship group, select the desired group from the pick list, and then click the **Update** button.

Splitting Relationship Groups

- To split an existing group by moving an issue over into a new group, select the desired filters, and then click the **Split** button.
- A screen similar to the following appears:



Split Relationship Group screen

- Enter a title for the new Relationship Group, then select a Group owner from the pick list.
- Remove any issues that you don't want to split off by un-checking the associated checkboxes.
- Select a parent issue for the new group.
- Click the **Update** button.

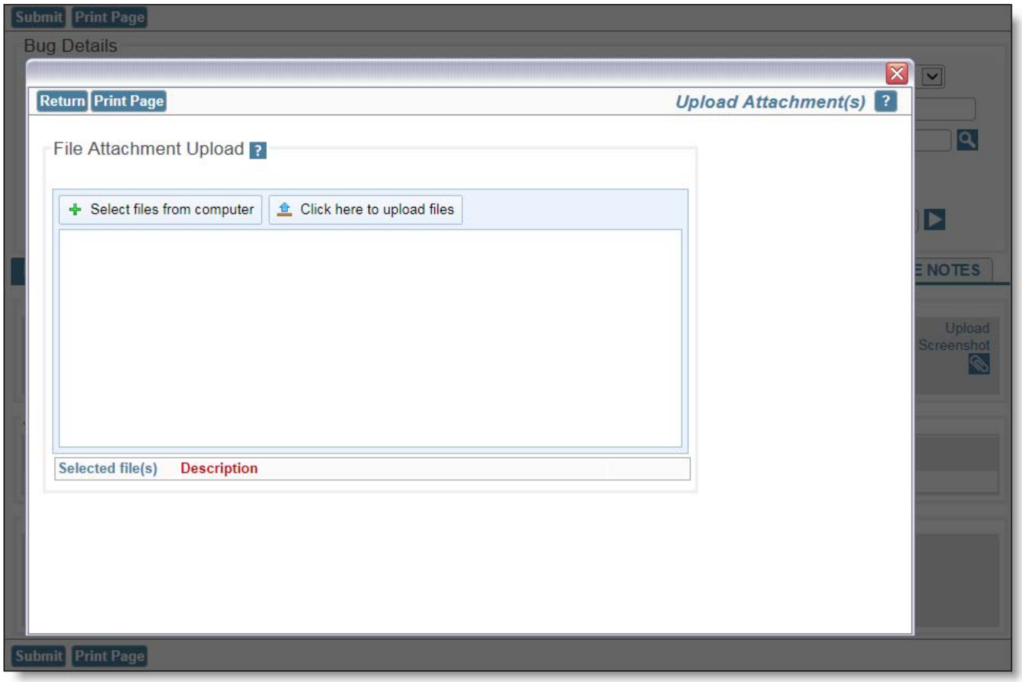
Attachments

ExtraView gives you the ability to add an unlimited number of file attachments to any ExtraView issue. Attachments can include captured screen shots and documents or files. ExtraView gives you the ability to attach any number of files of any type to any given issue. Depending on the database used on the ExtraView server, each file attachment may be up to 2 GB (Microsoft SQL Server) or 4 GB (Oracle). If the database is MySQL, then the size limit is set by the administrator, but is generally smaller.

There are several interfaces for uoading file attachments within ExtraView. The primary method is described first. The remaining methods were used with earlier versions of ExtraView but retained for backwards compatibiilty. The reason for the change was browser developers such as Google and Mcrosoft removing support for Java applets being run within browsers. The primary interface works across all support browsers, but does lack some minor features.

Adding Attachments

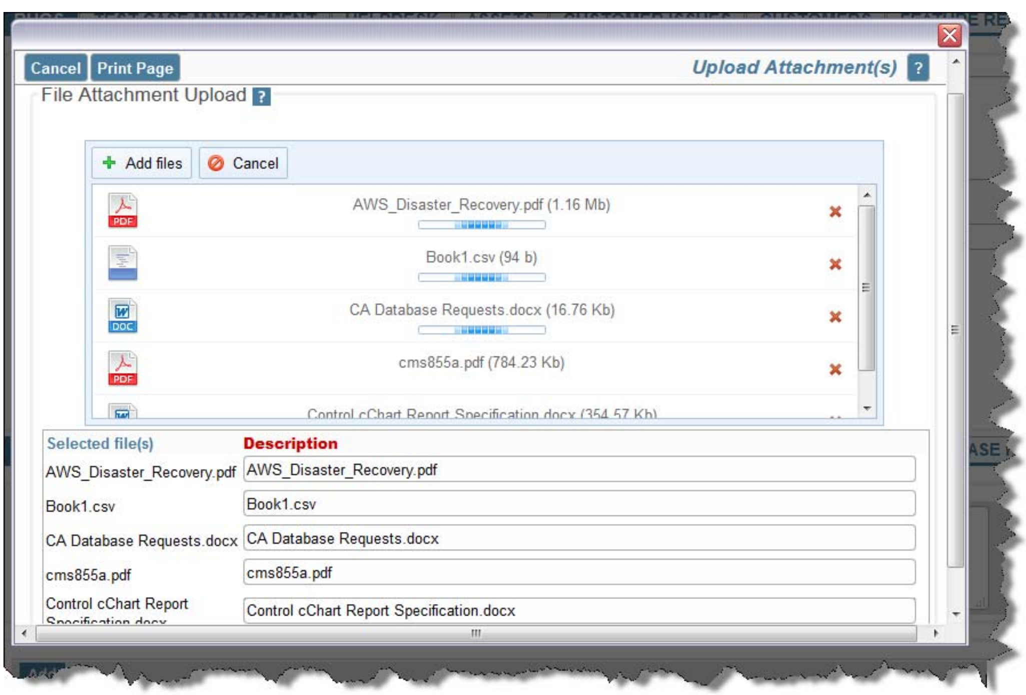
From the *add* or the *edit* screen, click the **Add Attachments** button. A popup window will be displayed. The upload screen look like this:



Adding attachments

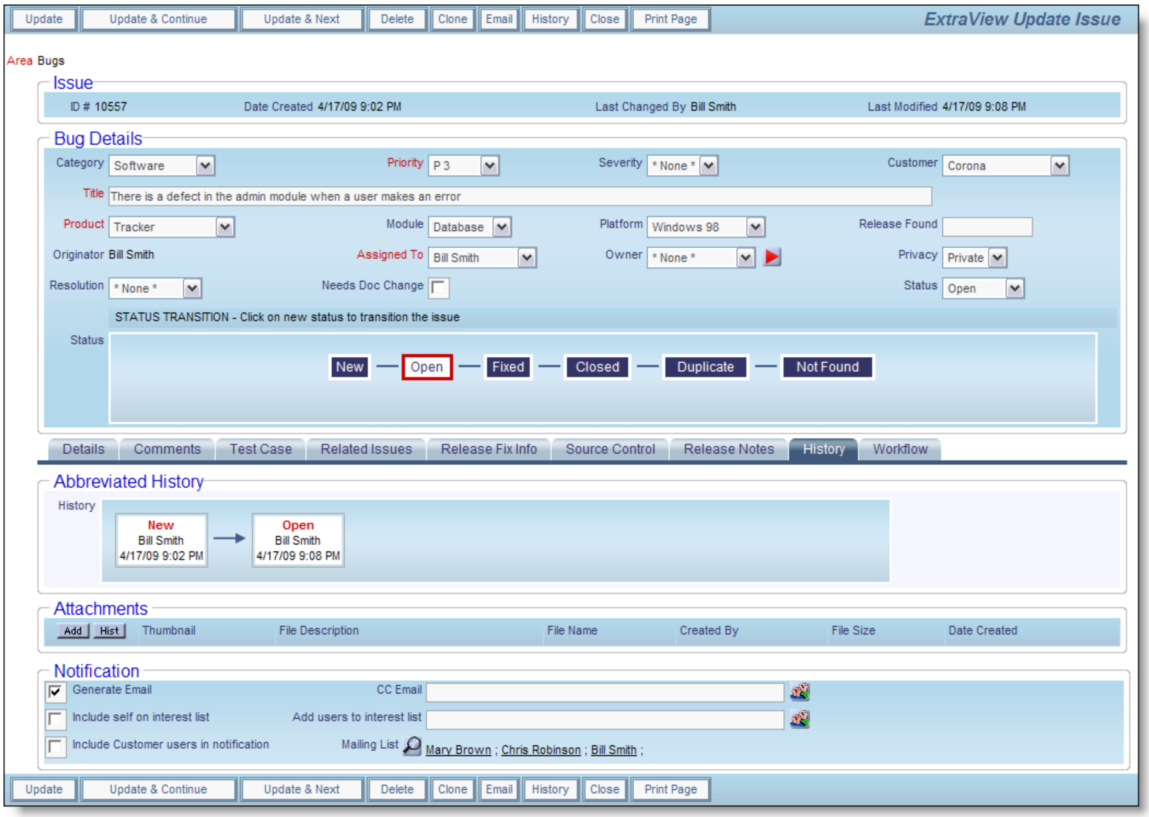
The interface support two means of adding file attachments to be uploaded. First, the **Add files** button provides access to the file system of your computer. From there you may select up to 10 files to be uploaded in one operation. Secondly you may drag up to 10 files over the popup and drop them there, to prepare them for upload. Once you have the files prepared, you may enter descriptions for each of them in the popup, then press the **Upload** button.

You will see a progress bar for each file as it is being uploaded, similar to the screenshot below.



Viewing Attachments

From the *Edit Issue* screen, click the **View** button next to the Attachment you would like to view. If the attachment is an image file, of type JPG, GIF or PNG, then a thumbnail image of the attachment will appear, and you can also click on the thumbnail to view the complete attachment.



Edit Issue screen

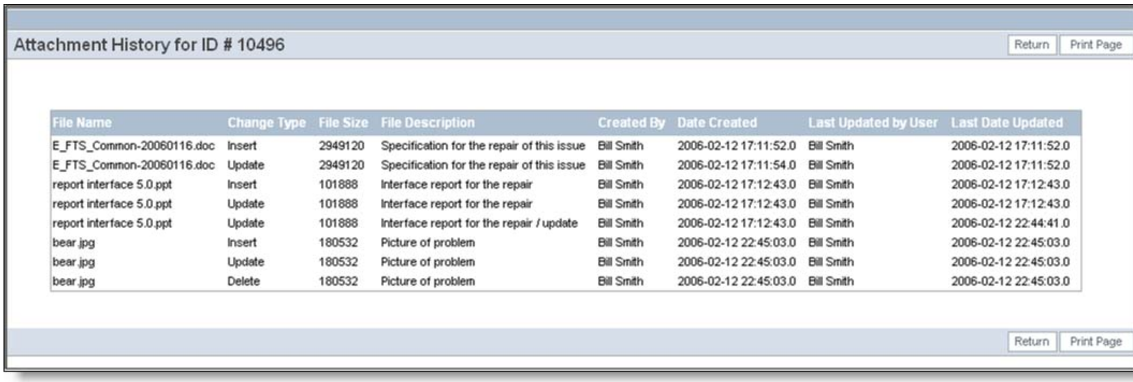
Editing and Deleting Attachments

Note that your administrator must have given you permission to delete attachments.

- From the *Edit Issue* screen, click the **Desc** button next to the attachment that you want to edit.
- Change the description and then click the **Update** button.
- If you would like to delete the attachment, click the **Delete** button.

Viewing the history of attachment changes for an issue

From the Edit Issue screen, press the **Hist** button to see a record of all the changes to attachments within an issue. This only appears if your administrator has given you permission. The history attachment screen is as follows. Note that you will see the history of all attachments for the issue, showing whether each attachment was inserted, updated, viewed or deleted.

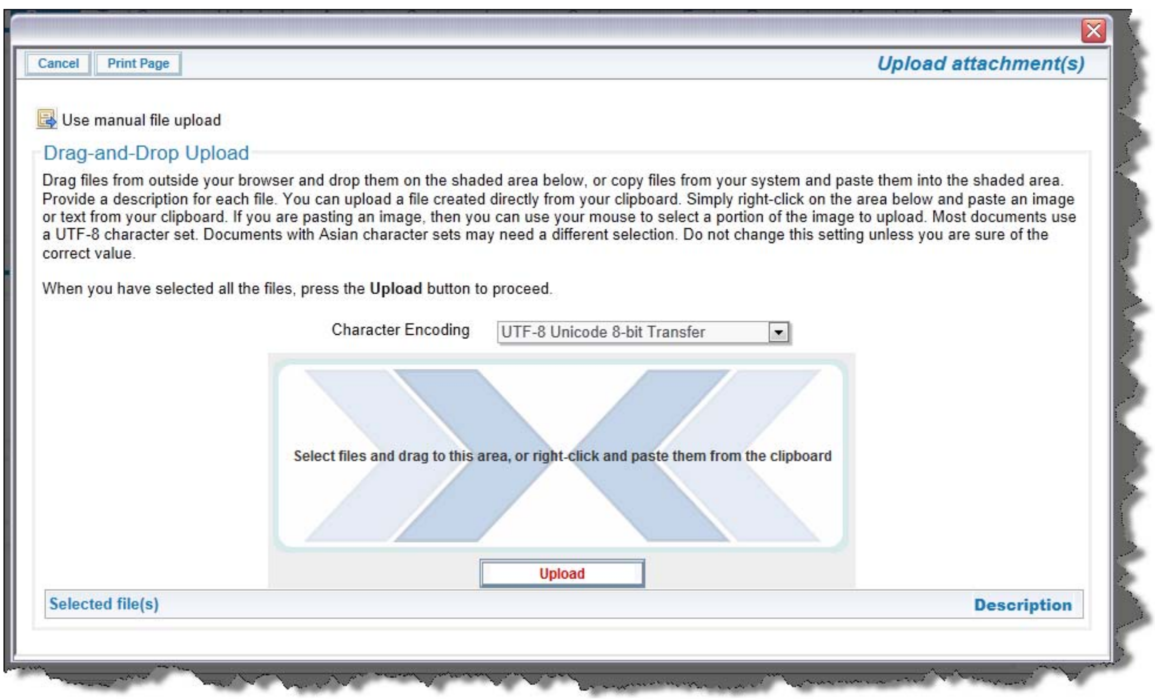


File Name	Change Type	File Size	File Description	Created By	Date Created	Last Updated by User	Last Date Updated
E_FTS_Common-20060116.doc	Insert	2949120	Specification for the repair of this issue	Bill Smith	2006-02-12 17:11:52.0	Bill Smith	2006-02-12 17:11:52.0
E_FTS_Common-20060116.doc	Update	2949120	Specification for the repair of this issue	Bill Smith	2006-02-12 17:11:54.0	Bill Smith	2006-02-12 17:11:52.0
report interface 5.0.ppt	Insert	101888	Interface report for the repair	Bill Smith	2006-02-12 17:12:43.0	Bill Smith	2006-02-12 17:12:43.0
report interface 5.0.ppt	Update	101888	Interface report for the repair	Bill Smith	2006-02-12 17:12:43.0	Bill Smith	2006-02-12 17:12:43.0
report interface 5.0.ppt	Update	101888	Interface report for the repair / update	Bill Smith	2006-02-12 17:12:43.0	Bill Smith	2006-02-12 22:44:41.0
bear.jpg	Insert	180532	Picture of problem	Bill Smith	2006-02-12 22:45:03.0	Bill Smith	2006-02-12 22:45:03.0
bear.jpg	Update	180532	Picture of problem	Bill Smith	2006-02-12 22:45:03.0	Bill Smith	2006-02-12 22:45:03.0
bear.jpg	Delete	180532	Picture of problem	Bill Smith	2006-02-12 22:45:03.0	Bill Smith	2006-02-12 22:45:03.0

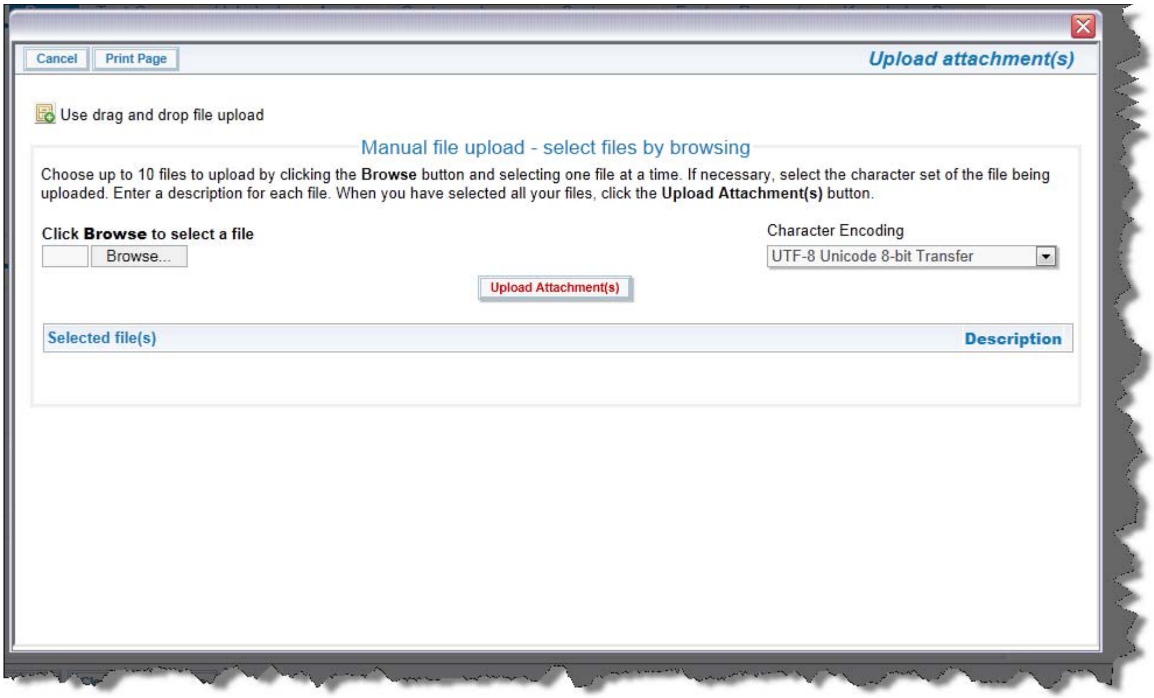
Attachment history screen

Adding Attachments - Legacy Mode

From the *add* or the *edit* screen, click the **Add Attachments** button. A popup window will be displayed. The appearance of the popup window will depend on whether your administrator has enabled the drag-and-drop file upload or has only enabled manual file upload. The drag-and-drop file upload has enhanced features, but does not work in every environment. If the drag-and-drop file upload has been enabled, but you have any problems with the feature, you can always press the **Use Manual Upload** button to revert to the manual upload method. The two upload screens look like this:



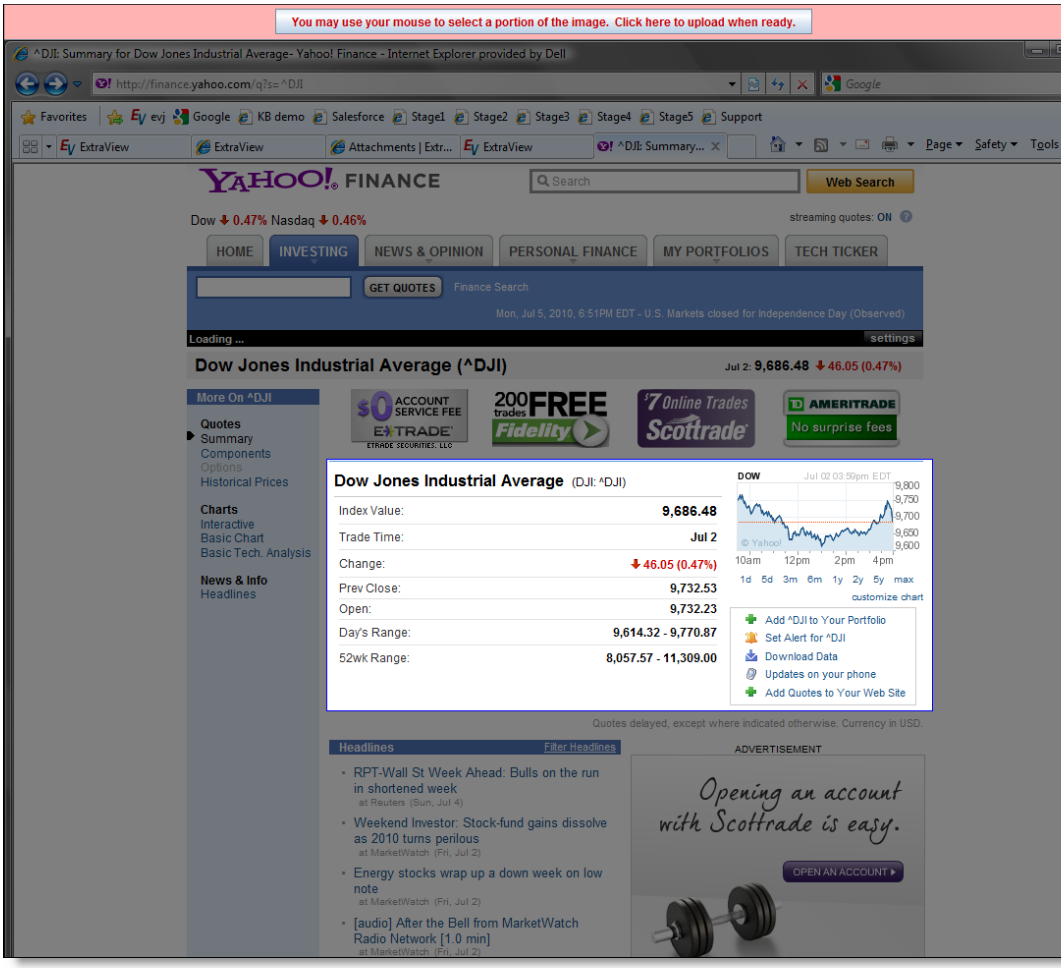
Adding attachments with drag-and-drop



Adding attachments manually

Drag-and-Drop Attachments

- From a window that displays files on your local computer, or from the desktop, select one or more files and then drag them on top of the popup window. When over the upload image, release the mouse button and all the selected files will be displayed on the screen, ready for upload. Note that you can even select complete folders and drag-and-drop these to be uploaded
- Use the standard features of the operating system of your computer to capture a screen, or part of a screen. For example, you might use the **Prnt Scrn** or **Alt-Prnt Scrn** options in Microsoft Windows, or the **Command-Shift-3** option on a Macintosh to capture all or part of a screen. This places the captured image on the clipboard of your computer. Move your mouse over the drop area in the popup, then press the right-hand mouse button and select the **Paste** option. A new window will open showing the image you have captured. Either select the entire image with the button at the top of the window or use your mouse to crop a portion of the screen and then select the highlighted portion. The image on the clipboard is converted into a file that can be uploaded.



Cropping an Image that was Pasted into the File Upload Utility

You can remove files incorrectly selected with the **Remove** button. Once you have the correct files, you perform the upload by pressing the **Upload** button.

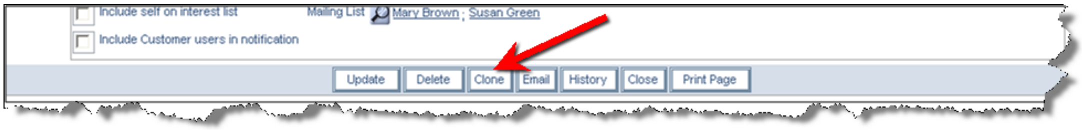
Manually Adding Attachments

From the popup screen you add attachments by pressing the **Browse** button and selecting a file to upload. After the file appears in the lower half of the window, add a description for the file. If necessary, use the **Character Encoding** select list to choose the character set of the file being uploaded. For most purposes the default value of **UTF-8 Unicode 8-bit Transfer** is the correct value. Asian users will often find they need to select a different value. You can remove files incorrectly selected with the **Remove** button. Up to ten files may be selected for a single upload session. Once you have the correct files, you perform the upload by pressing the **Upload Attachment(s)** button.

Cloning an Issue

For some kinds of issues, such as repetitive customer issues, it may be useful to clone an existing issue, and then make some small set of modifications to the new record.

- From a given issue's edit screen, click the **Clone** button.

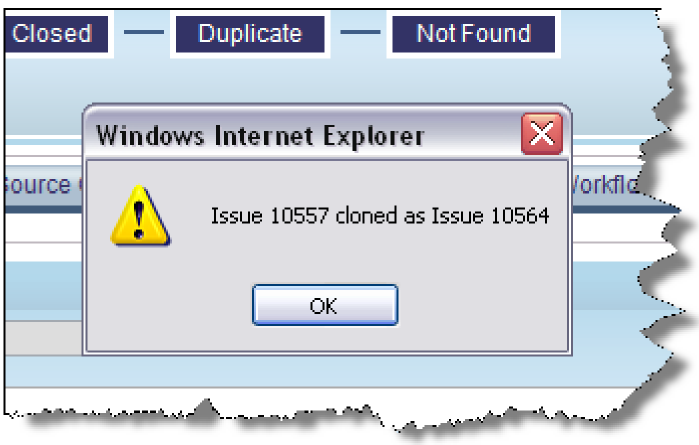


Issue Edit screen

If there are required fields that must yet be entered on the edit screen, you are prompted to complete these, and the Clone operation is not completed.

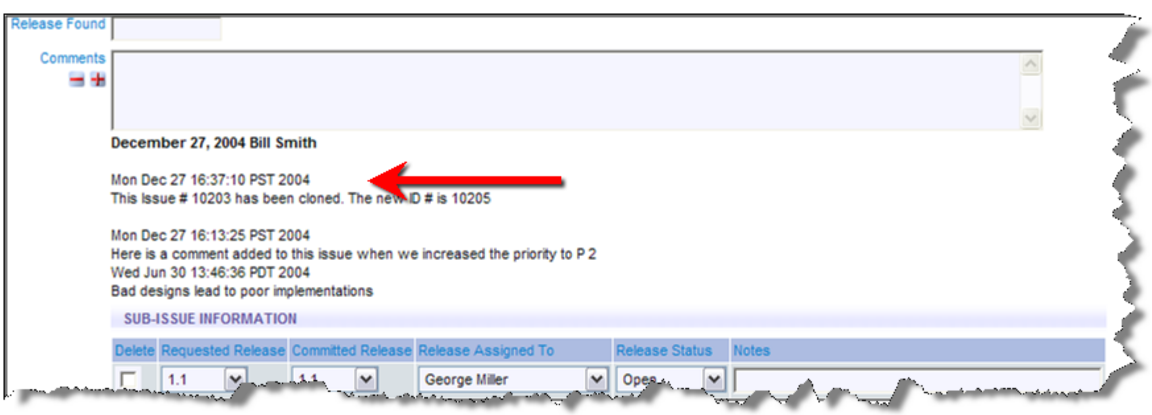
Before ExtraView clones the issue, you are asked to confirm that it is OK to save the changes you may have made, and proceed with the cloning operation.

If the form is complete, the following alert message appears to indicate success:



Clone Issue Alert Message

- Click the **OK** button, and the cloned issue's edit screen becomes available.
- The cloned issue is distinguishable from the original by the issue number, and by the following message that also appears on the edit screen:



Cloned Issue Edit screen

Note: The user who clones a given issue becomes the originator of the newly cloned issue (whereas the originator of the first issue may very well be someone else). In addition, the date/time that the cloned issue was created becomes the current date/time for the new issue.

Deleting an Issue

1. Click on the **Edit** button next to the issue you want to modify (from a Quicklist Report, Detailed Report, email notification, etc.).
2. Click the **Delete** button at the top or bottom of the Edit screen.

Note: The Administrator may have turned off the option to delete issues in your installation.

Mass Updating of Issues

Assuming the administrator has given you permission, there will be a button labeled **Update Issues** on Quicklist Reports, Detailed Reports and Custom Reports that you generate. This button allows the batch or mass update of a list of fields available to you. For example, you may want to re-assign all the open issues assigned from one person to a different person. Another example may be to move a range of issues open against a specific release to another future release of the product. Not all fields can be updated by this method. Only fields to which you have write access, and fields that are of display type List, Pop-up, Tab, User, Checkbox, Text and Number can be updated. In addition, if a field is subject to special treatment or processing that has been set up by your administrator, it will not be available for updating by this method. If you are using the ExtraView feature that allows multiple repeating records to be creating against each issue, then the fields on the repeating records cannot be updated with this facility. To use this feature:

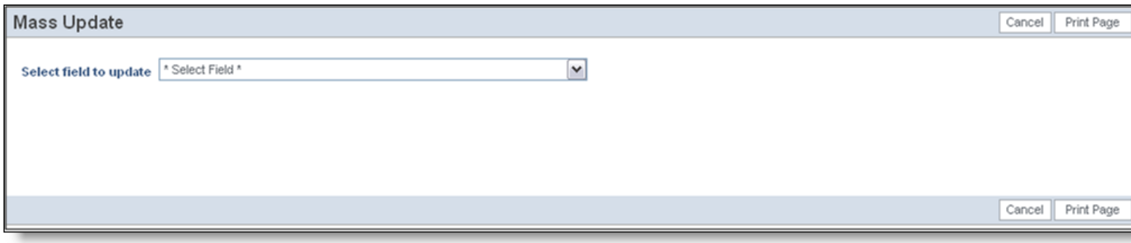
- First, prepare a report.
- Click on the **Update Issues** button on the menu bar of the report.
- Select the field you want to update from the list offered to you.
- You will then see a prompt asking for the new value for the field as well as a list of all the issues that are about to be updated. You can uncheck any issue from the list that you want to exempt from the update.
- You must check the button **Generate Email** button if you want the standard notification sent for each issue being updated. The default for this is not to send email, as you may be generating a very large list of updates and hence email notifications.
- Click **Update**. Note that if you have updated a large number of issues, the process may take some time to complete.

Note: If the field you are updating is a multi-valued field or part of a repeating record that can have many values, then the update will add the new value to the existing list of values for the field you are updating.

Note: You may not be able to undo this mass update operation, so take care before pressing the **Update** button.

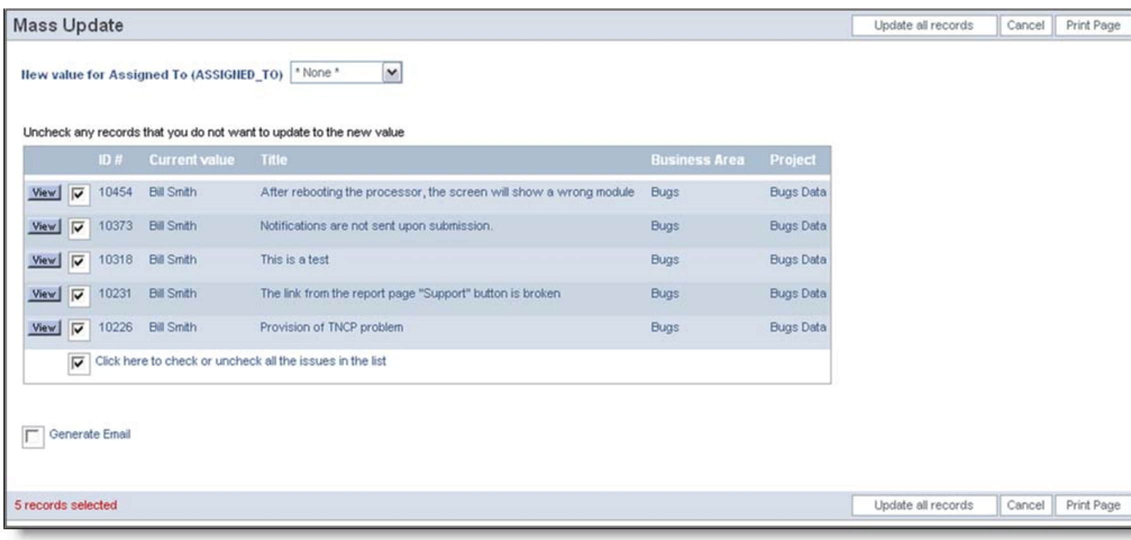
Note: Allowed value combinations are not used within the Mass Update feature. It is the responsibility of the user to select valid allowed value combinations when selecting values from the lists in the Mass Update screen. If an incorrect combination is selected and the user proceeds with the mass update, then it will fail.

Note: You may update issues across multiple business areas and projects, provided the value to be updated does not violate any business rule such as a field being required. **Example**: This shows how you can reassign all open issues from one person to another, for a given product: Prepare a Quicklist report that selects Business Area = Bugs and Status = Open and Assigned To a specific user as filters. From the resulting report output, press the **Update Issues** button. You will see a screen similar to:



Selecting a field to update

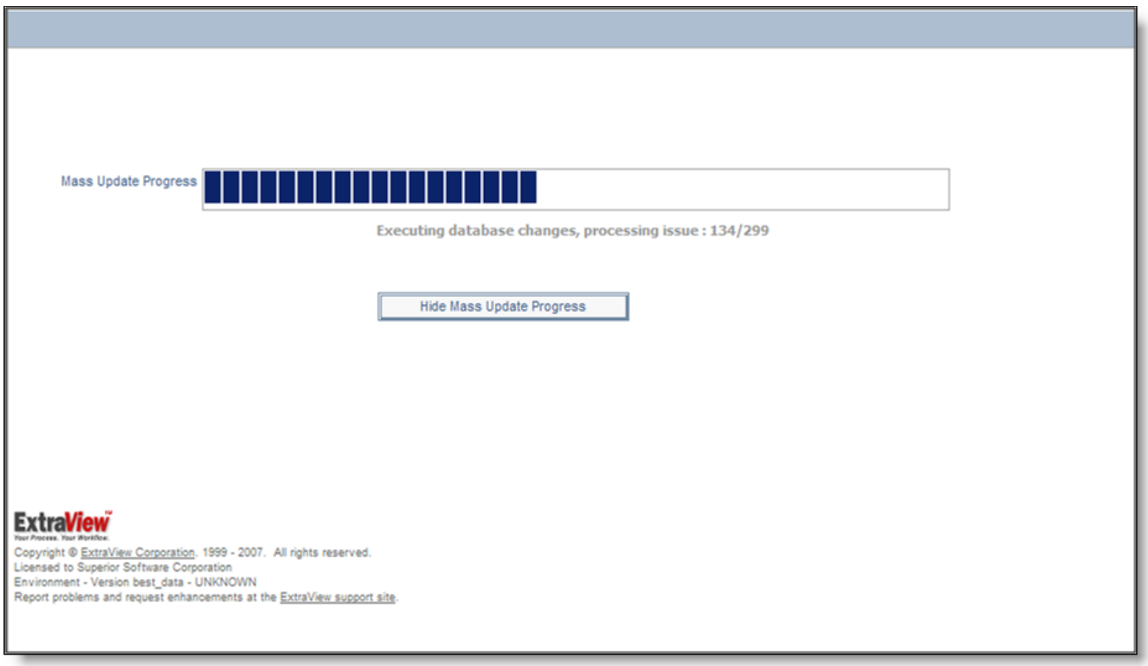
Select the Assigned To field from the list and the screen will redisplay, showing something similar to:



Mass update screen

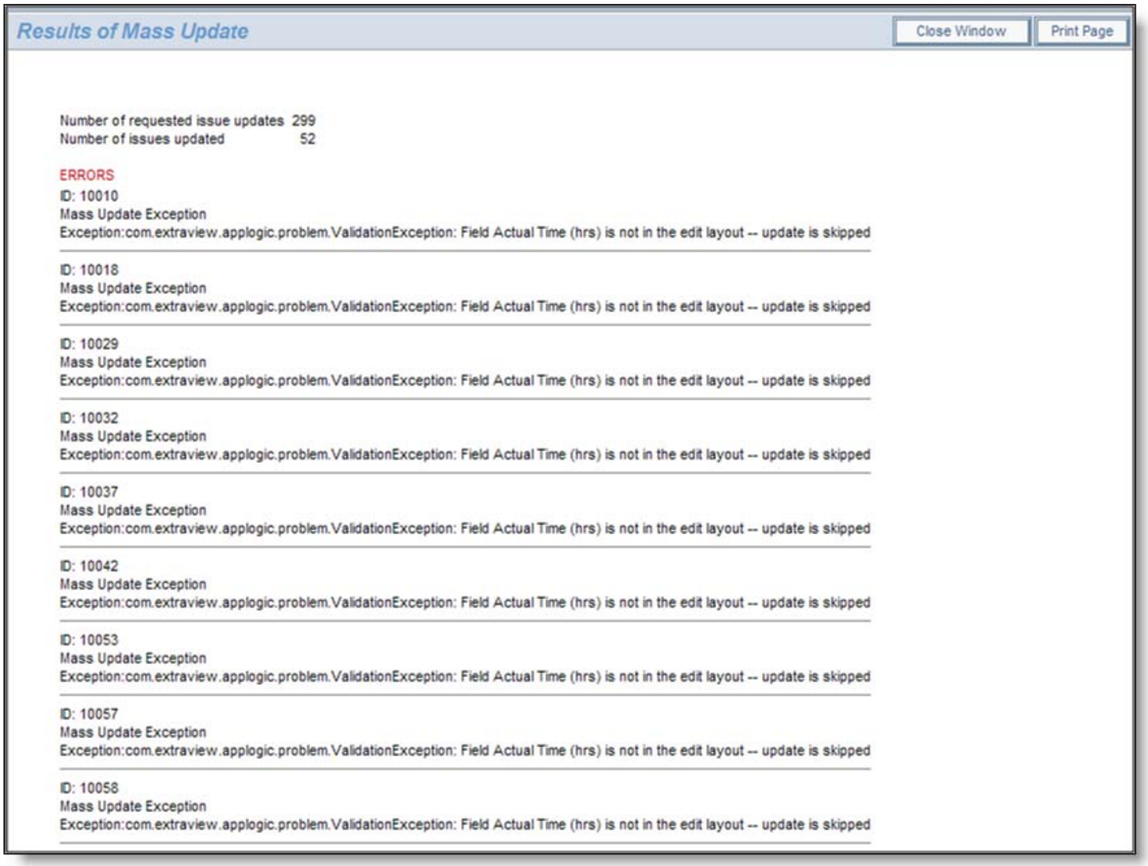
From the select list labeled **New value for Assigned To**, select the person you want to reassign the issues to. You can view any of the issues to check whether they should be part of the update, and you can uncheck any or all of the issues. If the field you are trying to update is dependent upon another field (for example a *module* field may be dependent upon product), then you will be prompted for the parent field, then the child field, to ensure that the relationships between the values are kept intact and only valid combinations are stored. If you try to update a parent field that would invalidate the child records, for example trying to set the product field to a value that is not appropriate for a given module, you will receive an error for that issue, or issues, and these issues will not be updated.

Note: You can only update issues that are within your currently set Business Area and Project. If your search results contained any issues, or items in any other Business Area or Project of the system, they will not be updated. When ready, you can press the **Update all records** button. You will be asked to confirm that you want to update the issues. Expect the update to take one – two seconds per issue to perform the update. Updating the issues is a process that happens in the "background" of the computer server. This has a number of advantages. First, it makes the mass update process less prone to error conditions if your local computer malfunctions or crashes midway through the process, or the communications network is disrupted for some reason. Second, managing the mass update as a background process allows ExtraView to monitor for attempts for one user, or several users to start mass updates while other mass updates are still running. This can lead to data integrity or data corruption problems, and of course is highly undesirable. While the mass update is underway, you will see a progress window as follows:



Mass update progress bar

Note: Pressing the button to hide the progress bar, or closing the window has no effect on the execution of the mass update. As a background process, it will continue. The progress bar is purely for informative purposes. Once the mass update is complete, and assuming you have not closed the progress window, you will see a summary of the mass update, including any errors encountered. The most common error is trying to perform a global mass update across several business areas, when the field you are trying to update is not on the *edit* screen for the business area and project to which the issue belongs.



Results of a mass update, showing errors

Mass Update and Multi-Valued Fields

Multi-Valued fields are treated differently for the purpose of mass update. When you select one or more values in a multi-valued field to be updated, the selected values are added to the current values within the field. The existing field values remain untouched. If you want to replace the values in the field, first mass update the multi-valued field to a value of *** None ***, then perform the update you want to add the values to the field.

Mass Update and Repeating Rows

Mass update works with repeating rows, but there are a couple of points to consider:

- If the report from which you initiate a mass update does not include any filters on fields in the repeating rows, and you then decide to mass update one or more fields on the repeating row, then ExtraView does not have enough information to target specific repeating rows for the mass update. *All repeating rows of all the issues that are being mass updated will be updated to the value or values you provide.*
- If the report from which you initiate a mass update includes a filter on one or more fields on repeating rows, then ExtraView will only update these repeating rows during the mass update.

Email Notifications

ExtraView provides a number of powerful email notification features. As a general default, ExtraView sends email to:

- The person who *Originated* an issue
- The person who is *Assigned To* the issue
- The person who is selected to be the *Owner* of the issue
- Any other person whose name appears on the issue screen in a list field

When you observe email notification received in HTML format (the default), the fields within the notification is color coded.   Unless your administrator has changed the defaults, the colors signify the following:

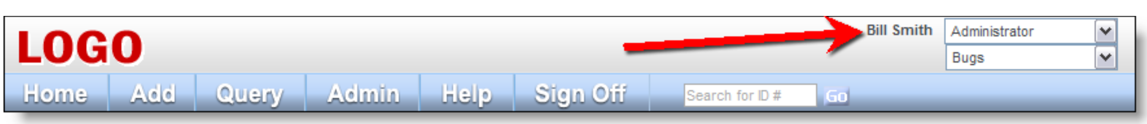
Black	This signifies that the value of the field that did not change when the issue was updated
Red	This signifies that the value in the field has altered in the update to the issue. Observe that in a newly recorded issue, all the fields will be colored in red
Green	This signifies that the value has changed in the last update to the issue
Grey	The value was deleted in the last update to the issue

Note: Rich text HTML Area fields are not colored witihn any notification. This is because they are rendered exactly as the text within the field is colored. This might include any number of colors within a single field.

A number of the email functions are accessible only by those users who have administration privileges. These include enabling/disabling email notification system-wide, disabling notification by User Role, and some of the Interest list functions. For example, only administration users can setup and manage product interest lists and field or metadata specific interest lists. Despite these restrictions, however, regular users also have a number of different options. The email functions that can be controlled by the individual user are detailed below.

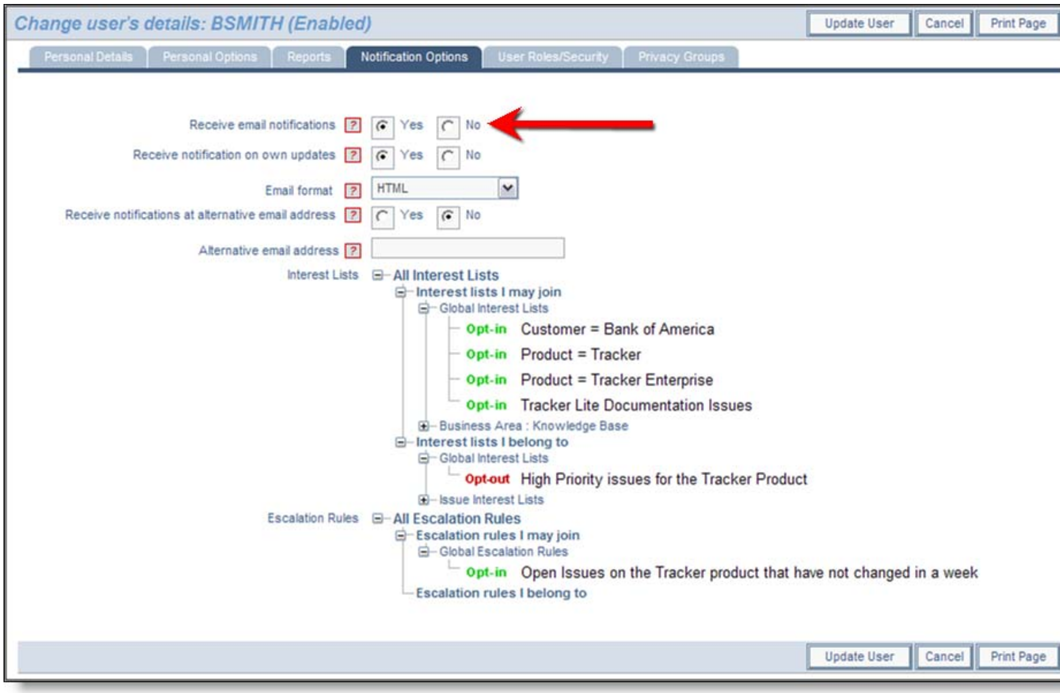
Turn Notification On & Off

This allows you to turn email notification on and off for your personal account.



Navigation Bar

- From the navigation bar click on the your name and link to the **Change user's details** screen. After entering your password, select the **Notification Options** tab.
- A screen similar to the following appears:



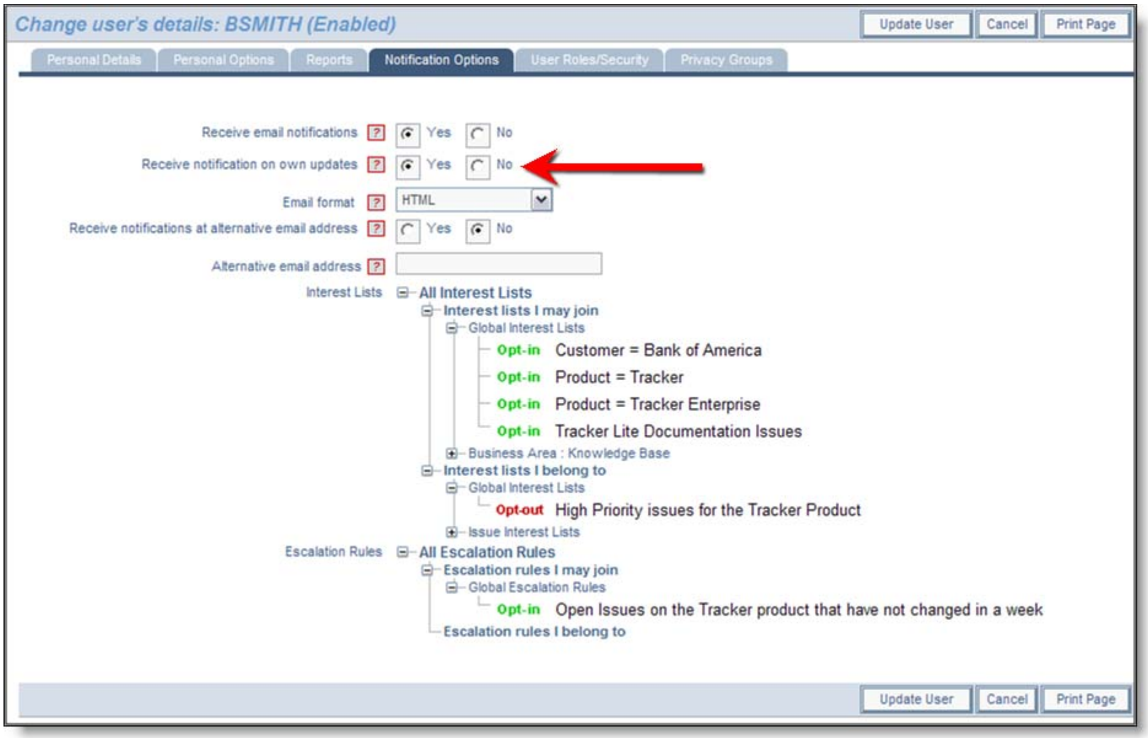
Change a User’s Details screen

- Set the value in Receive email notifications to “No” (If you do not want to receive email notifications from ExtraView)
- Click the **Update User** button.

Notify On Own Updates

This feature gives you the option to disable automatic email that you generate to yourself on issues that you *Add* or *Edit*. This minimizes the amount of email that you receive.

A screen similar to the following appears:



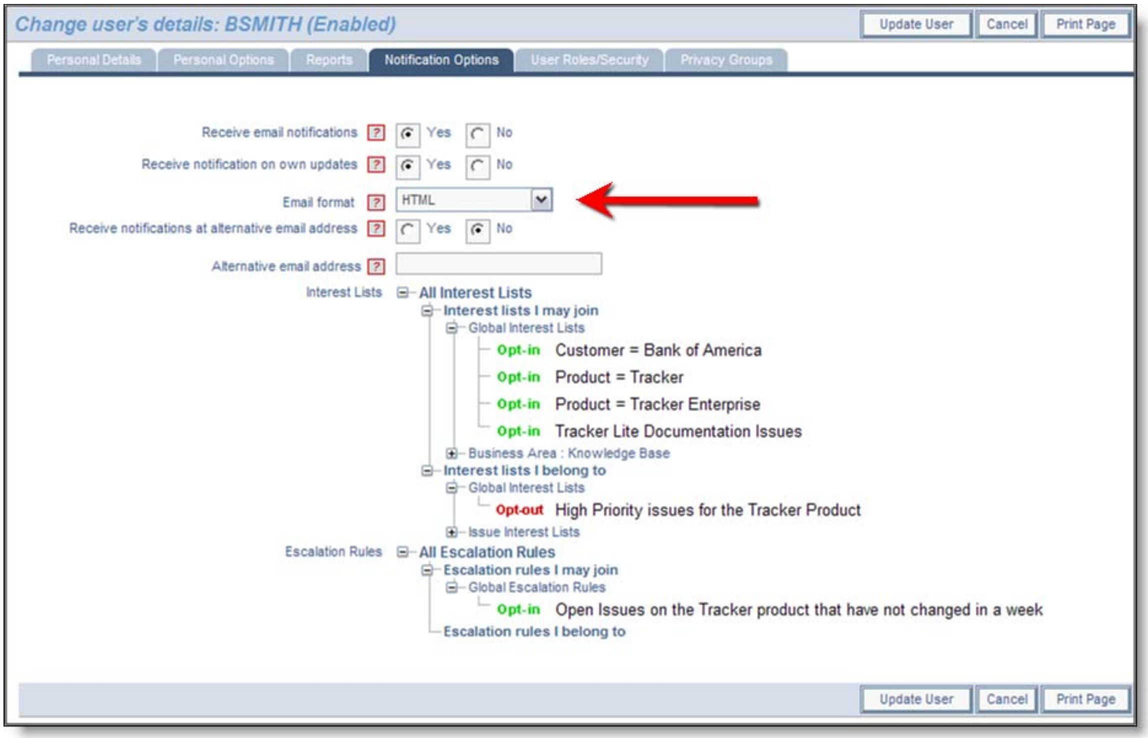
Change a User’s Details screen

- Set the value in Notify of own updates to “No” (If you do not want to receive email).
- Click the **Update User** button.

Select Email Format

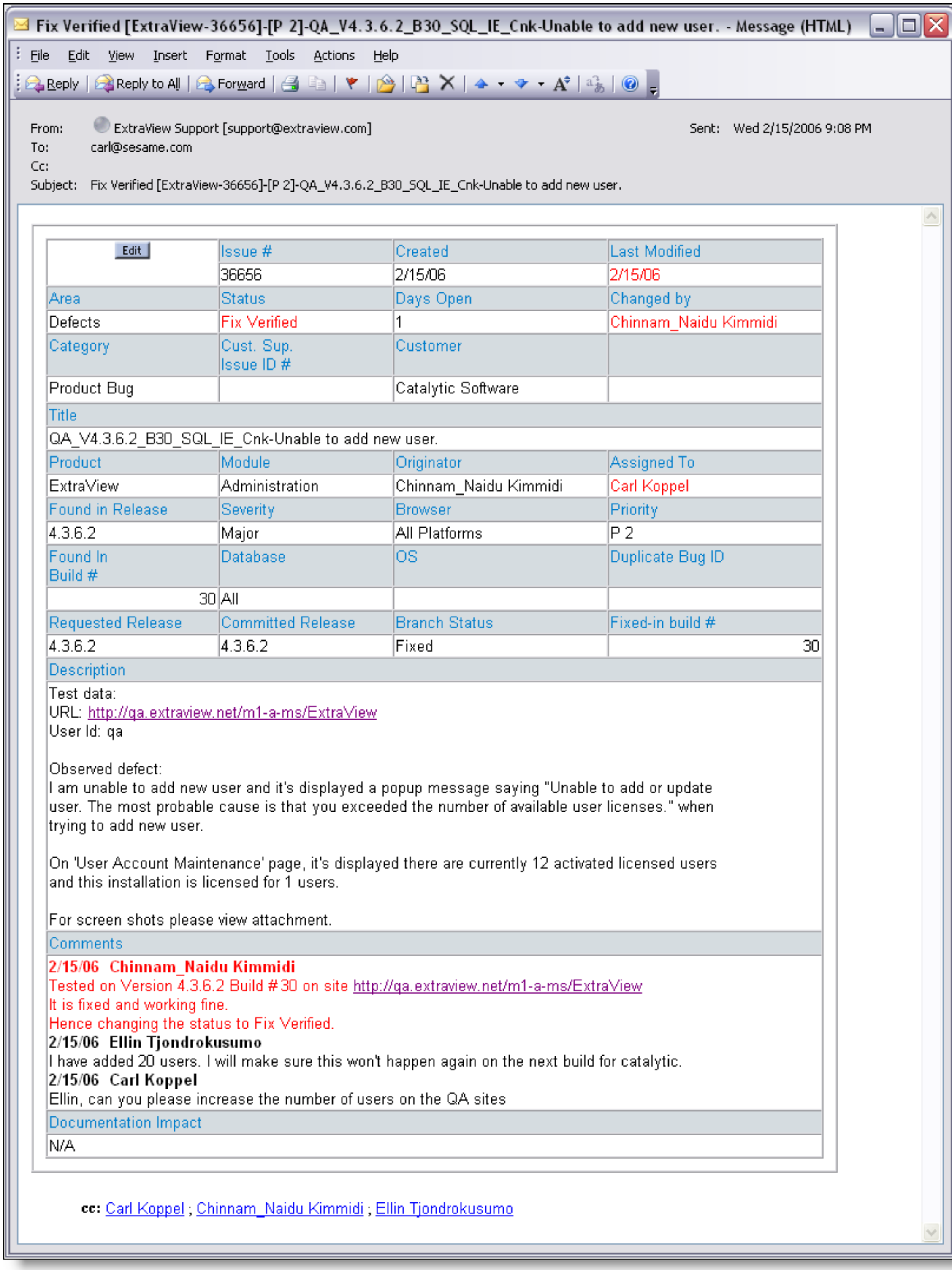
Choose to display incoming email in one of three formats: HTML, Plain Text (full) and Plain Text (brief). Plain Text (full) displays the entire email, while Plain Text (brief) shows just a few lines, so that the issue may be recognized. Plain Text (very brief) shows just the fields that changed when the issue was updated.

From the navigation bar, click on your name to access your personal options, enter your password and choose the **Notification Options** option. A screen similar to the following will appear:



Change a User's Details screen

The default email format is HTML. If you would like to see your email in another format, select the desired format from the Email format list. Click the **Update User** button. Below are examples of the different email formats that can be received:


Fix Verified [ExtraView-36656]-[P 2]-QA_V4.3.6.2_B30_SQL_IE_Cnk-Unable to add new user. - Message (HTML)

File Edit View Insert Format Tools Actions Help

Reply | Reply to All | Forward

From: ExtraView Support [support@extraview.com]   Sent: Wed 2/15/2006 9:08 PM
To: carl@sesame.com
Cc:
Subject: Fix Verified [ExtraView-36656]-[P 2]-QA_V4.3.6.2_B30_SQL_IE_Cnk-Unable to add new user.

Edit	Issue #	Created	Last Modified
	36656	2/15/06	2/15/06
Area	Status	Days Open	Changed by
Defects	Fix Verified	1	Chinnam_Naidu Kimmidi
Category	Cust. Sup. Issue ID #	Customer	
Product Bug		Catalytic Software	
Title			
QA_V4.3.6.2_B30_SQL_IE_Cnk-Unable to add new user.			
Product	Module	Originator	Assigned To
ExtraView	Administration	Chinnam_Naidu Kimmidi	Carl Koppel
Found in Release	Severity	Browser	Priority
4.3.6.2	Major	All Platforms	P 2
Found In Build #	Database	OS	Duplicate Bug ID
30	All		
Requested Release	Committed Release	Branch Status	Fixed-in build #
4.3.6.2	4.3.6.2	Fixed	30

Description

Test data:
URL: http://qa.extraview.net/m1-a-ms/ExtraView
User Id: qa

Observed defect:
I am unable to add new user and it's displayed a popup message saying "Unable to add or update user. The most probable cause is that you exceeded the number of available user licenses." when trying to add new user.

On 'User Account Maintenance' page, it's displayed there are currently 12 activated licensed users and this installation is licensed for 1 users.

For screen shots please view attachment.

Comments

2/15/06 Chinnam_Naidu Kimmidi
Tested on Version 4.3.6.2 Build #30 on site http://qa.extraview.net/m1-a-ms/ExtraView
It is fixed and working fine.
Hence changing the status to Fix Verified.
2/15/06 Ellin Tjondrokusumo
I have added 20 users. I will make sure this won't happen again on the next build for catalytic.
2/15/06 Carl Koppel
Ellin, can you please increase the number of users on the QA sites

Documentation Impact

N/A

cc: Carl Koppel ; Chinnam_Naidu Kimmidi ; Ellin Tjondrokusumo

HTML Email within Microsoft Outlook

```
   Subject: Open  [#19419]: Category doesn't seem tied to Product anymore
      Date: Wed, 2 May 2001 13:57:53 -0700 (PDT)
      From: "ExtraView" <extraview-user@customer.com>
        To: <support@sesame.com>



ExtraView Notification for Bug # 19419

*Synopsis: Category doesn't seem tied to Product anymore

Link: http://www.extraview.net/extraviewsql/SE_Signon.FrameSet?p_case_id=19419

*Product: Dev Tools
*Originator: rlloyd
*Owner: rlloyd
*Changed By: dwong
*Priority: 1
 Severity:
*View: Private
*Last Modified: 02-MAY-2001 13:57
*Category: Software
 Alt ID:
 Created: 02-MAY-01

*Module: ExtraView
 Component:
*Platform: all
 OS:
 Clarify ID:
 Test Case ID:
 Test Case Location:
 Problem Reproducible in SQA:

*Version Open: 3.1.2.1
*Status: Open
 Version Closed:
 Disposition:

*Description:
If you select Product=EV, Category=Software, you will see two modules called
"EV".  Go into Admin...Modules and one is Hardware, one is Software.


 Comments:



--------------------------------------------------------------------------------
```

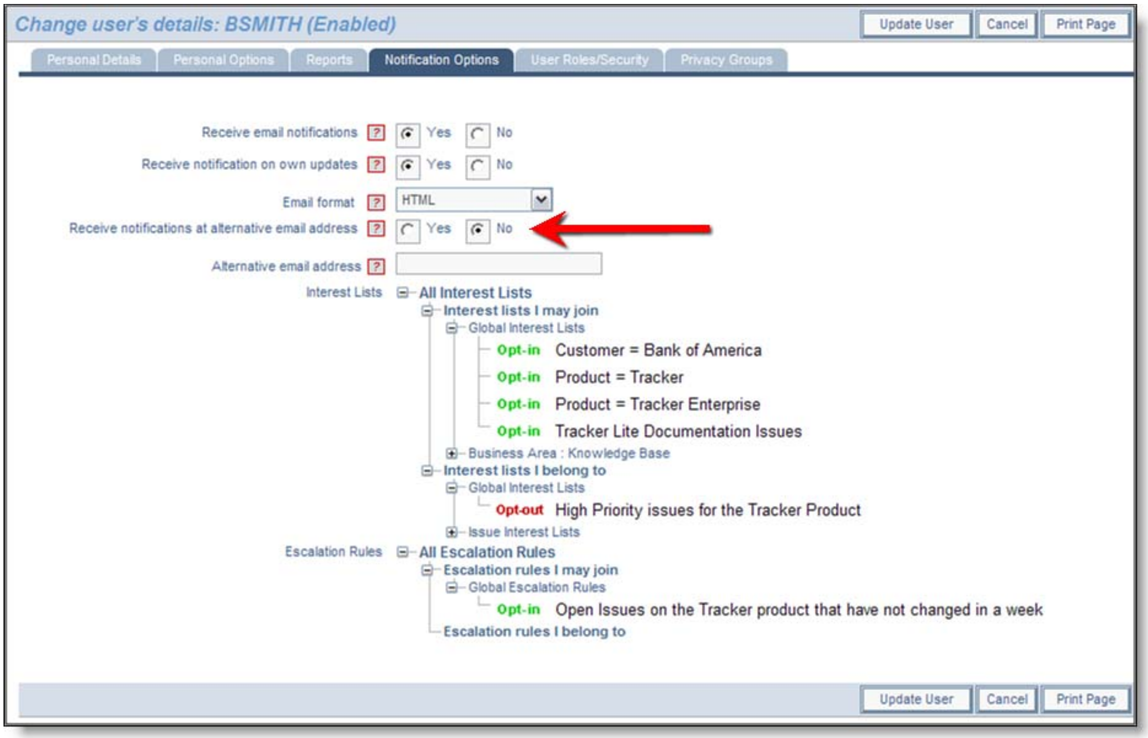
Plain Text (Full)

```
   Subject: Open  [#19419]: Category doesn't seem tied to Product anymore
      Date: Wed, 2 May 2001 13:57:53 -0700 (PDT)
      From: "ExtraView" <extraview-user@customer.com>
        To: <support@sesame.com>



ExtraView Notification for Bug # 19419

*Synopsis: Category doesn't seem tied to Product anymore

Link: http://www.extraview.net/extraviewsql/SE_Signon.FrameSet?p_case_id=19419

*Product: Dev Tools
*Originator: rlloyd
*Owner: rlloyd
*Changed By: dwong
*Priority: 1
 Severity:
*View: Private
*Last Modified: 02-MAY-2001 13:57
*Category: Software
 Alt ID:
 Created: 02-MAY-01

*Module: ExtraView
 Component:
*Platform: all
 OS:
 Clarify ID:
 Test Case ID:
 Test Case Location:
 Problem Reproducible in SQA:

*Version Open: 3.1.2.1
*Status: Open
 Version Closed:
 Disposition:

*Description:
If you select Product=EV, Category=Software, you will see two modules called
"EV".  Go into Admin...Modules and one is Hardware, one is Software.


 Comments:



--------------------------------------------------------------------------------
ExtraView - Copyright Sesame Technology 1999, 2000. All rights reserved.
```

Plain Text (Brief)

Email Options

It is often useful to have ExtraView notify you at a different email address as an alternative, or as addition to your principal email address. Your principal email address is managed through the tab named **Personal Details**. To set up an alternative email address, such as a pager, use the **Notification Options** tab on the screen. You can both set an alternative email address as shown, and you can turn it on and off as needed.



Change a User's Details screen

Disable Automatic Email Generation

Each time you add or edit a issue, you have the opportunity to halt all email generation by un-checking the Generate Email checkbox at the bottom of the Add and Edit screens.

Edit Issue screen

CC Mail

Each time you add or edit a issue, you have the opportunity to send a one-time, cc mail to any named users in the system or to any other person. To send cc mail, either click the people icon located beside the **CC Email** field, and select the named users you would like to receive the notification, or enter an email address in the **CC Email** field.

Edit Issue screen

If you are entering multiple email addresses, you can use a space character, a semi-colon character or a comma between the email addresses.

Note: The **Generate Email** checkbox must be selected in order to send CC email.

Email Interest Lists

Interest lists can be based upon issues, or upon the value of fields within issues. Here are some examples of interest lists:

- Assuming a user has permission, they may place themselves on the interest list for an issue, thereby assuring that they will receive notification of all changes to the issue, no matter who makes the change
- An interest list may be defined which is based upon the value of one or more values within the issues. For example, the Product Manager may place himself upon an interest list so they will receive notification on any issue that has their product selected; another example may be that an Account Manager may want to see all the issues regarding their customer; another example may be that the General Manager may want to see all high severity issues from a number of customers.

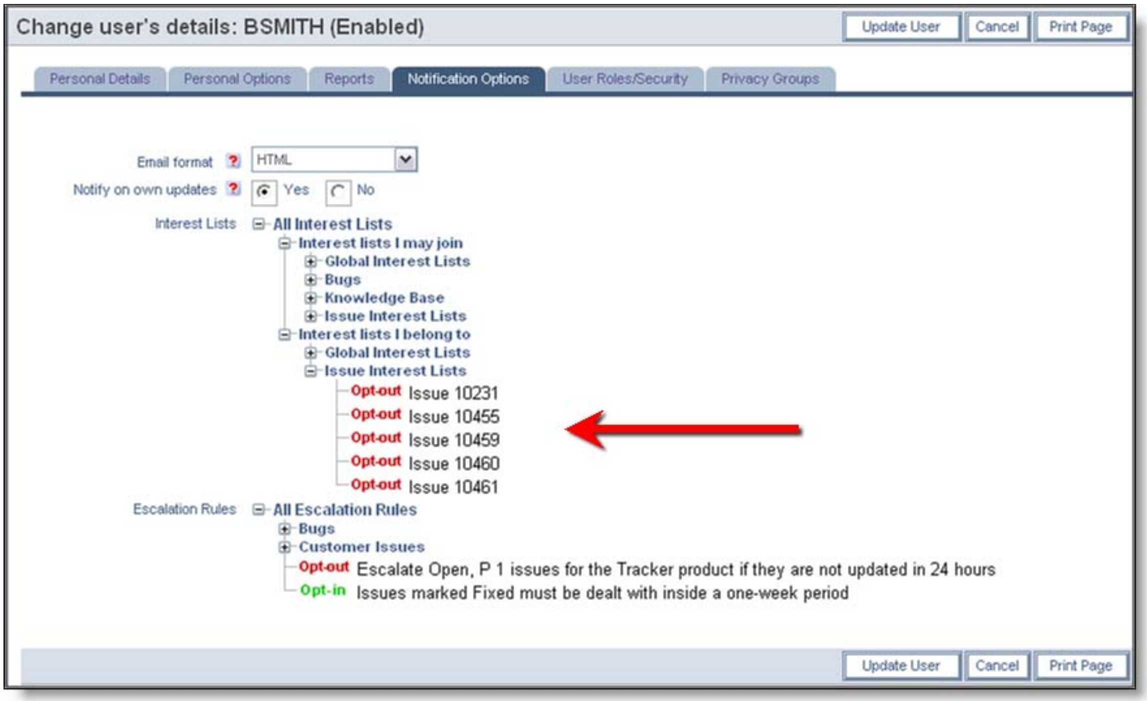
Email notifications are automatically generated to the owner of the issue and the assigned person of the new issue entered. If you are changing the state or other information related to an issue, then email is sent to the owner, the originator and the person assigned to the issue. If any of these values are the same, only one email will be generated per person. In addition, users can subscribe to an interest list for any issue.

Issue Interest Lists

Two mechanisms exist for manipulating issue-based interest lists. Assuming the administrator has granted you permission, you will see a checkbox when adding or updating an issue, within the Notification section of the screen. To place yourself on the interest list for the issue, simply check the box. To remove yourself, uncheck the box.

Issue-based interest lists

You may also remove yourself from your personal issue-based interest lists from your **Account**: menu bar option by choosing the **Notification Options** entry. From there, you can opt-in or opt-out of any issue-based or other interest list.



Opt-in and Opt-out from interest lists

Field-based Interest Lists

Field-based interest lists provide the purpose of notifying you when a value, or combination of values, on any issue being updated, have specific values. For example, interest lists could be established to notify users upon the following circumstances:

- When the **Priority** of the issue is *P 1*
- When the **Product** is *Tracker* and the **Customer** is *ABC Corp*
- When the **Status** is *Fixed* and the **Module** is *Database*

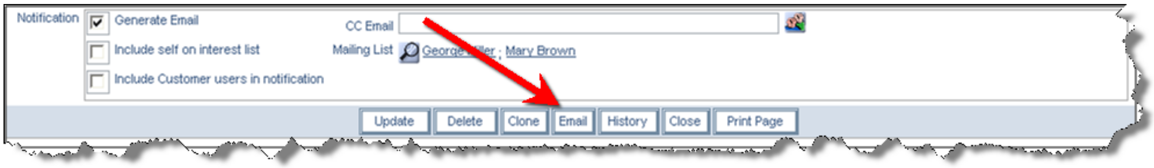
The administrator will have established interest lists as appropriate for you installation, and there may be some interest lists which are fixed and to which you cannot alter your subscription. However, there may be some interest lists to which you can either opt-in or opt-out, at your own discretion. When you look at your interest list, you can click on the **Opt-in** or **Opt-out** button by each interest list entry, to achieve this.

Custom Email

The custom email feature allows the ExtraView user to send email notifications (using templates or a custom email that you compose) to a list of email addresses generated by means of filters. For example, an organization might decide to have internal users (who create customer issues in ExtraView) always enter the customer's email address in an email text field that can be made to appear on the Add Issue screen layout. If someone in customer support or marketing then wanted to send batch mail to all customers associated with a certain set of issues, the ExtraView user can drill down to a given issue's edit screen, and then click the **Email** button to activate the feature, select filters to generate the email list, select a template, or write a custom mail, and then send the message.

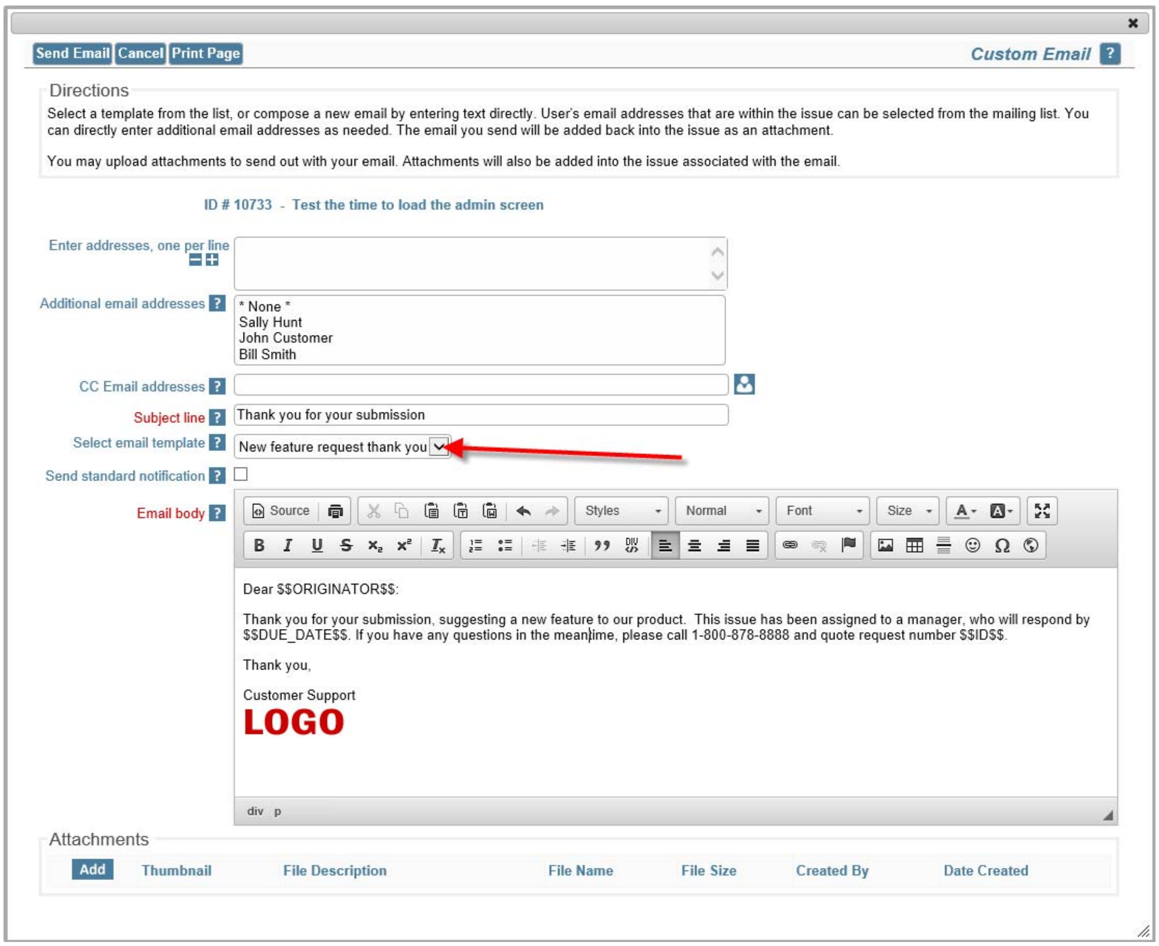
To Create Custom Email

Click the **Email** button from an appropriate issue's Edit screen.



Issue Edit screen

The following screen appears:



Custom Email screen

1. Enter email addresses to which you want to send the email in the text area with the title **Enter addresses, one per line**. Additional addresses (these are ExtraView users), may be selected from within the area titled **Additional email addresses**.
2. You can use the **CC Email addresses** to enter or select additional people to whom you would like to send a copy of the email.

3. The **Subject line** is required.
4. You can either enter the text to send into the text area of the screen, or you can choose an email template from the pick list, and the template text will populate directly into the email body. Note that the email body allows you to enter and edit the text as HTML, using the toolbar above the field. For full details on how to use the editor, see Appendix B of this guide
5. To create custom mail that you enter directly, type the desired content into the email body field. When you select a template, there is a warning if you already have text in the email body, ensuring you only overwrite the body deliberately. You may use $$ on either side of a database field name (e.g., **$$CATEGORY$$**) and the value selected in the original issue will populate the email text when it is sent. For a full list of field names that you can use, ask your system administrator for a list
6. You may include image fields and document fields as part of a custom email. When you place the field name of either of these field types into a custom email (e.g. **$$MY_DOC_FIELD$$**, then the name of the document or image file is placed into the email body in place of the token, and the image or document is added as an attachment to the outgoing email notification.
7. Check the box titled **Send standard notification** if you want the standard email notification to be sent in addition to the custom email you are preparing on this screen.
8. If you are editing an issue, you may add an attachment from the list displayed. This functionality is not available when adding a new issue.

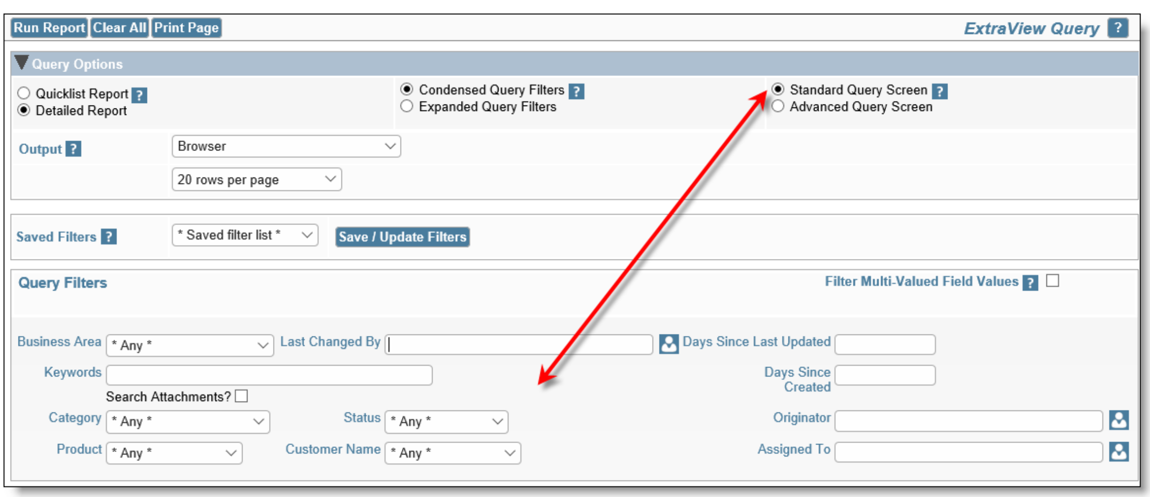
Note: The database names selected for use within the email tags must be fields that appear on the Edit screen layout, or else they won't return any data.

Note: Once your email has been sent, it is appended to the issue as an attachment.

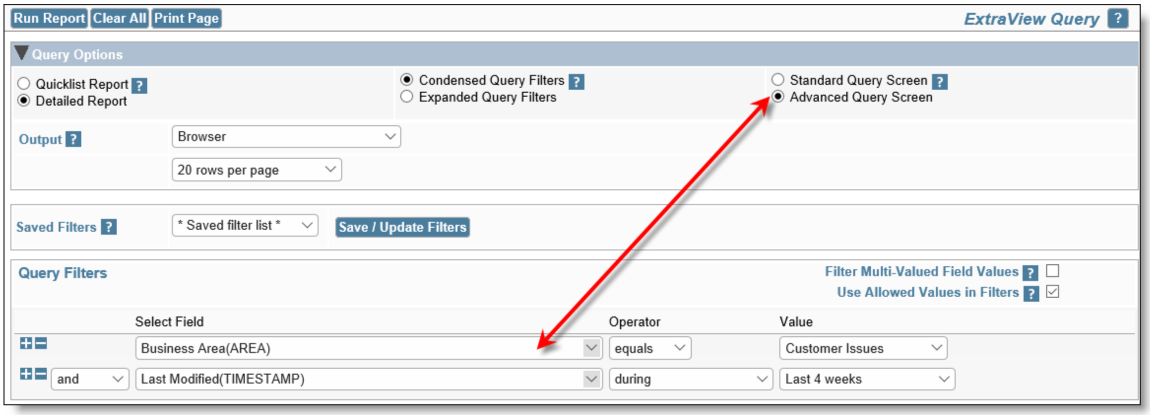
Querying

The Query screen allows you to quickly create and ad-hoc report and present the results on a Quicklist or a Detailed Report.

There are two types of filtering, using the Standard Query Filters or the Advanced Query Filters.



Standard Filters on Query Screen



Advanced Filters on Query Screen

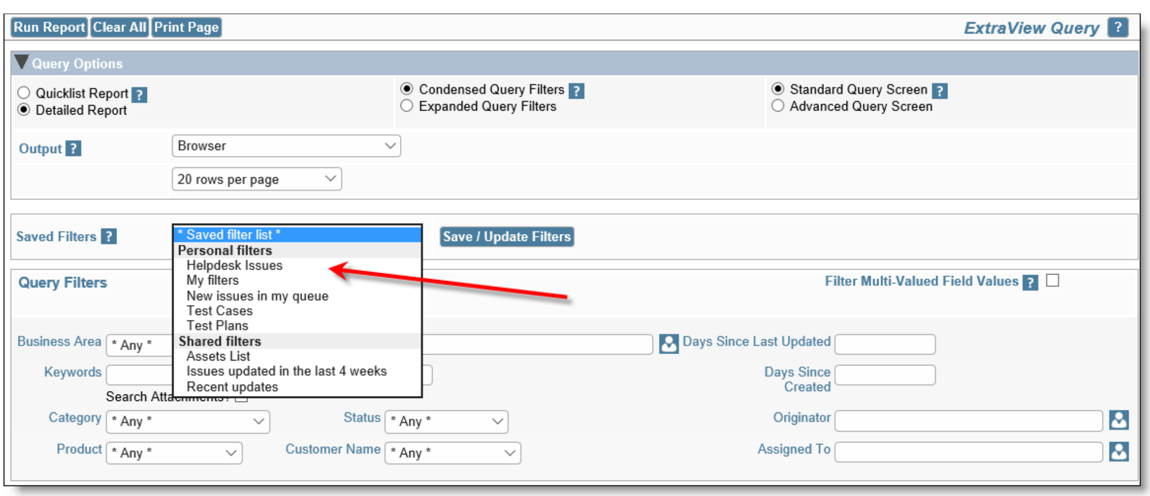
You can also select options to allow you to use either [Condensed Query Filters or Expanded Query Filters]() as well as [saving your current filters]() for reuse at a future time.

Query Filters

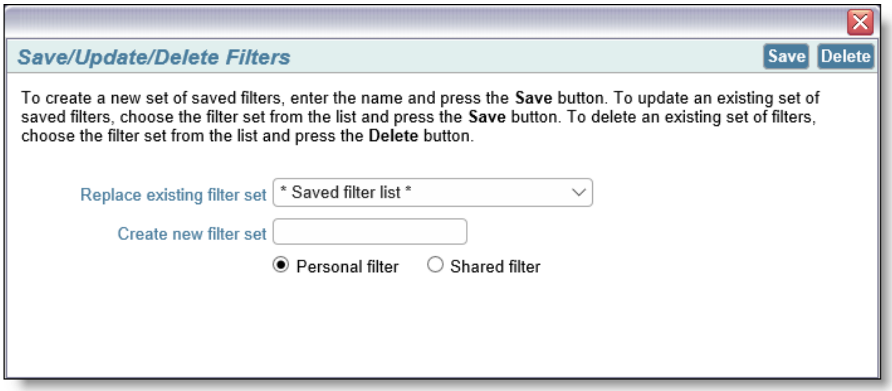
Selecting query filters will impose restrictions upon the report being produced and return a set of results that matches the filters you set. For example, if you select the **Status** *Open*, then only open issues will be displayed. Filters can be combined together, for example to show *Open* issues for the product named *XXX* that have been updated in the last 7 days.

Saving Filters for Future Use

After setting up filters, you may want to save them for future recall. To achieve this, simply use the **Save / Update Filters** button. After saving the filters, you can recall them by selecting the name you used in the select list. Saved filters may be personal, and with permission you can save them to be shared by all users. These saved filters are independent of the reports saved within ExtraView, although you can include any saved filters within a report that you create.



Saving filter sets

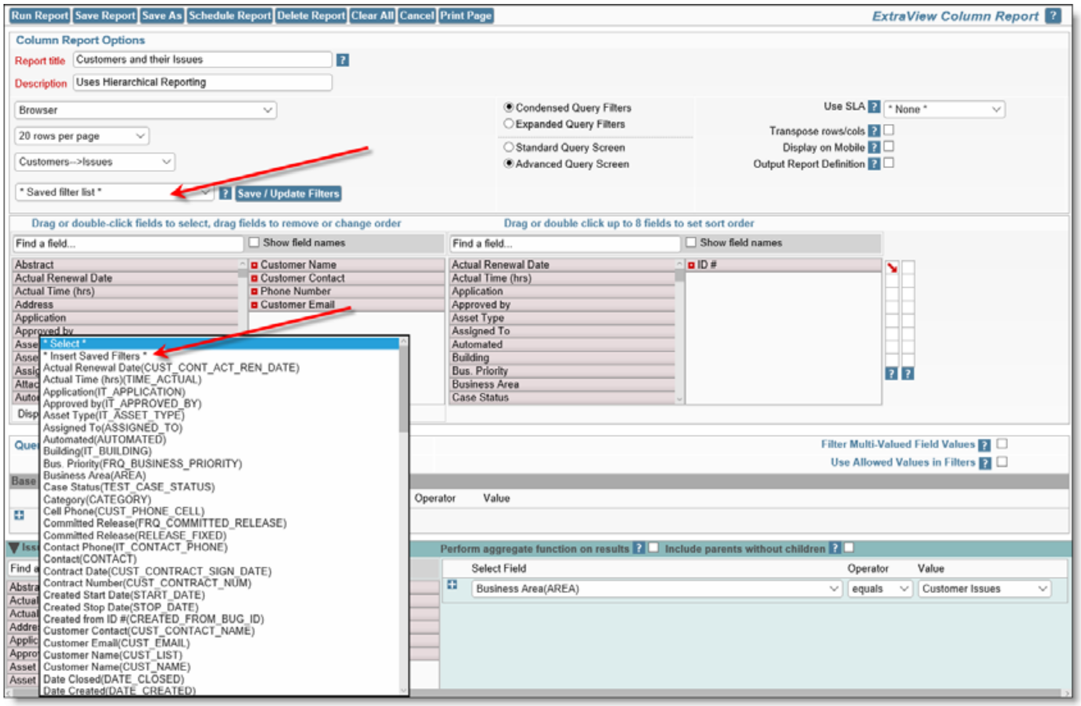


Dialog for saving filters

Using the popup dialog, you can also delete an existing filter set.

There are a few caveats on the use of saved filter sets:

- You may save either Standard or Advanced query filters, and on the Query screen, they will be recalled in the same manner they were saved
- Saved filters may only be recalled within a report editor, when you are in Advanced query mode. However, if you recall a set of Standard filters when you are in the Advanced mode, they are converted to Advanced filters
- When in a report editor, and you are in Advanced query mode, you may save your filters. If you are using a report hierarchy, the filters will be saved and can be used in any report editor, but will not be visible on the Query screen where reporting hierarchies are not supported
- Within a report editor, you can either recall a set of saved filters to replace all the current filters, or can recall a set of saved filters to be inserted at any point within the filters currently chosen. To replace all the filters, simple choose from the *** Saved Filter List ***, to insert a filter choose the option within the field list titled *** Insert Saved Filters ***:



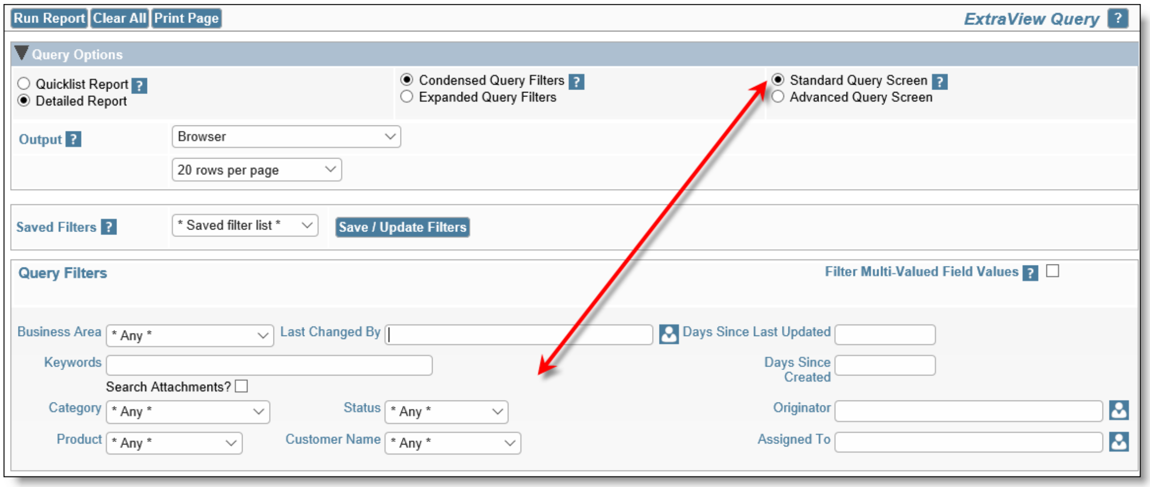
Saved Filters within a Hierarchical Report Editor screen

- You are warned if you are about to overwrite current filters with saved filters and given the opportunity to cancel.

Note: With Advanced Filters only, you can create saved filters where the fields have the value of *** Any ***. Whereas filters with the value of *** Any *** are typically ignored, and discarded when saved, there is a purpose to this feature. Consider that you might have a set of many filters that you want to use frequently as you create reports. These reports may or may not require all the filters, but you want them to be easily available when creating these reports. This provides a rapid way to construct the filters for these reports.

Standard Query Mode

This allows you to choose the values for fields, upon which records are selected for the report. There is a set of filters available directly on the Query / Report screen, as well as from the screens where you prepare or edit reports that you save for future use. Typically, the Query / Report screen will show the most common filters you use, while the remaining screens show a more complete set of filters to which you have access. The fields available for your use are set up by your administrator.

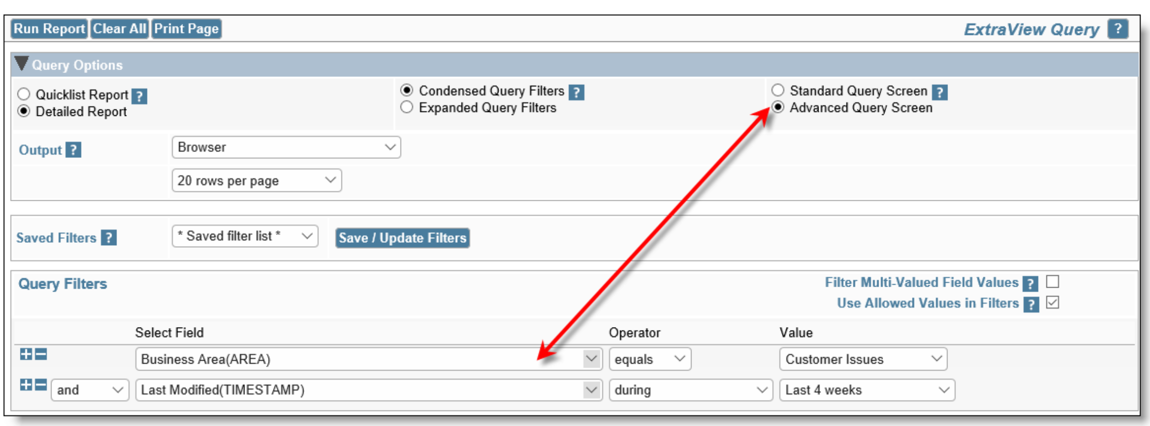


Standard query filters

If a query filter you select is the parent in a relationship, for example, the *Module* field may be dependent on the *Product* field, then the screen will refresh, and the child field will be populated with the valid entries for the parent you selected. If your administrator has enabled the feature that allows you to search for inactive users, an additional prompt appears on the screen alongside the Query Filters heading. This is a checkbox with the label **Show Inactive Users**. When you check this, all the selection lists of users, will be refreshed, and will show inactive as well as active users, allowing you to perform searches for users who were at one time, but are not currently, licensed users of ExtraView. Note that this feature only works in Standard Query mode, and is not operable in Advanced Query mode.

Advanced Query Mode

If your administrator has given you access to advanced query mode, you first will select an individual *field* as the first filter to use in selecting individual records for the report. Then you select an *operator* such as "equals" or "greater than", and then you select the *value*. For example, a filter may be: Status not equal to Closed You may add as many filters as you like, with each one beginning with a conjunction such as "***and***" or "***or***". Advanced filters take a little longer to set up than standard mode filters, but they allow much more flexibility to create a complex set of query filters.



Advanced filter selection

To add a new filter, use the button. Note that you can add filters following any existing filter. If you want to delete an individual filter from a query, use the button. This will eliminate the filter. In advanced mode, you can set the same filter field multiple times and use the "**or**" value. For example, you may set two filters as follows

Priority equals P1 or Priority equals P2

Alternatively, you can use the Expanded search mode described below, and select multiple values from the Priority list.

Advanced Query Filter Operators

The operators that appear in the drop down list are sensitive to the display type of the field you select. This allows you to select operators that only make sense and are eligible for each field display type. This table shows how this operates:

Field display type	Operator values in Condensed Filter Mode	Operator values in Expanded Filter Mode
Currency, Decimal, Number	Equals Greater than Less than Not equal Less than or equal to Greater than or equal to Empty Not empty	Equals Greater than Less than Not equal Less than or equal to Greater than or equal to Empty Not empty
Checkbox, List, Pop-up, Tab, User	Equals Not equal	Equals In Not equal Not In
Date, Day	Equals Greater than Less than Not equal Less than or equal to Greater than or equal to Between Empty Not empty During After Before After or during Before or during	Equals Greater than Less than Not equal Less than or equal to Greater than or equal to Between Empty Not empty During After Before After or during Before or during
Keyword	Contains	Contains

Text Field	Equals Contains Not Equal Empty Not Empty	Equals Contains Not Equal Empty Not Empty

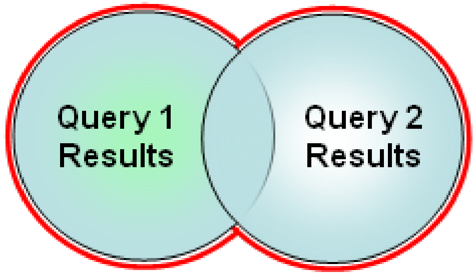
The operator values are largely self-explanatory, but a word of explanation is needed about the Empty and Not Empty values. When a numeric field (currency, decimal or number display types) is stored in ExtraView, and you do not enter a value, zero is not the value stored. A null, or empty value is stored and these are treated differently. Therefore searching for a value of empty will retrieve a different set of results that searching for a value of zero. Also, note that for Checkbox, List, Pop-up, Tab and User fields when in Expanded Query mode, there are two additional operators, In and Not In. These allow you to define a list of values to search for that must be present or must not be present. If you want to search for both empty and zero values, you may combine two filter conditions together, as exemplified by the following: **Amount** *Equals* 0 or **Amount** is *Empty.*

Fields with a display type of Date and Day present different options for their values, according to whether an arithmetic operator such as *equals* or *greater than* is chosen, or a duration such as *during* or *after* is chosen. When an arithmetic operaor is chosen, you may enter dates into one or both date value fields. When you choose a duration, you are presented with a list of durations such as *last month, this fiscal quarter* and *this month to date.* ExtraView understands the meaning of these durations and will filter your query or report using the duration you select.

Advanced Query Filter Conjunctions

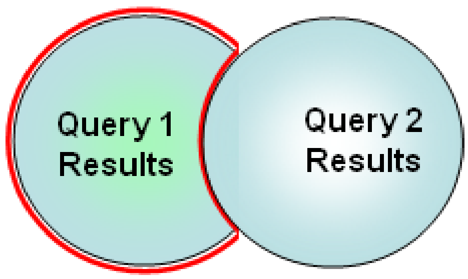
The following conjunctions can be used between the different filters of a report:

Conjunction	Meaning
and	This filter will ensure that both filter conditions on each side of the **and** are true, before including the results
or	This filter will include results from the search, if either of the conditions on each side of the **or** is true
union	This will take the results of all the filters together preceding the conjunction **union**, together with the results of the filters in the query following the conjunction, and merge the results of both queries. For example, if you **union** two queries together, then you will see the results of both queries being returned on the report. The area within the red outline shows the results returned by two queries using the **union** conjunction.



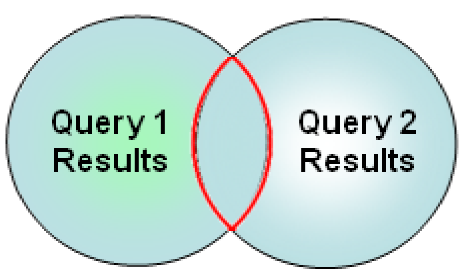
This will take the results of the query filter(s) before the conjunction **minus**, and remove all results in common with the results of the query filter(s) following the conjunction. For example, if the query before the **minus** returns 100 rows, and the query following the minus returns 60 rows, 30 of which are to be found in the first part of the query, you will see 70 rows on the report that is generated. The area within the red outline shows the results returned by two queries using the **minus** conjunction.

minus



This will take the results of the query filter(s) before the conjunction **intersect**, and only display the results that are in common with the results of the query filter(s) following the conjunction. For example, if the first part of your query before the **intersect** returns 100 rows, and the second part of the query after the **intersect** returns another 100 rows, and 30 of the results are in both parts of the query, you will see these 30 rows returned on the report. The area within the red outline shows the results returned by two queries using the i**intersect** conjunction.

intersect



If your ExtraView installation is running on a Microsoft SQL Server database prior to the 2005 version or on the MySQL database0 not all the conjunctions are functional due to database limitations. Only conjunctions that are known to work are operable. Check with your administrator if you are not certain which database is used by your company. If you have more than one **union, minus** or **intersect** conjunction in a query, then the filters up to the first one that contains the conjunction are grouped together. The order in which you choose filters is significant if you choose to use the "**or**" conjunction in your query. The rules for parsing the queries are as follows, with the parentheses showing the precedence.

Order of conjunctions	Significance
One "**or**" as the last filter	The condition in the filter with the "**or**" is used over the whole query. For example: Product equals XYZ and Priority equals P 1 and Status equals Open or Severity equals Severe This query is parsed as follows: (Product equals XYZ and Priority equals P 1 and Status equals Open) (or Severity equals Severe)
One "**or**" that is not the last filter	The "and" operators take precedence over the "or" operator. For example: Product equals XYZ and Priority equals P 1 or Priority equals P 2 and Severity not equal Severe This query is parsed as follows: (Product equals XYZ and Priority equals P 1) (or Priority equals P 2 and Severity not equal Severe)
There are multiple "and" and "or" filters	Once again, the "and" operators take precedence over the "or" operators. For example: Product equals XYZ and Priority equals P 1 or Priority equals P 2 and Severity not equal Severe or Severity not equal Major This query is parsed as follows: (Product equals XYZ and Priority equals P 1) (or Priority equals P 2 and Severity not equal Severe) (or Severity not equal Major)

Note: You can toggle between standard search mode filters and advanced search mode filters at any time, but the filters currently on the screen are reset. Filters are not lost when you change between condensed and expanded filters.

Allowed Values and Advanced Queries

Allowed values do not operate within filters selected for advanced queries. You will see all the parent and all the child values in the filter lists for these queries.

Querying for Inactive Values

Within Advanced Search lists, an entry * **Show disabled values** * will appear in any list that contains values that have been disabled by the administrator. For example, you may wish to search for issues where the *originator* of the issue has left your company and their account has been disabled. If the field contains any values that are disabled, then you can select * **Show disabled values** * and the screen will refresh, showing all the disabled values. You can revert to only displaying enabled values with the prompt * **Do not show disabled values** * that will now be in the list.

Querying with Date / Time Functions

Day and Date display type fields have two basic ways in which they are used as query filters, depending on the operator you select.

<table>
<tr><td>Operator</td><td>Functionality</td></tr>
<tr><td>Equals
Greater than
Less than
Not equal
Less than or equal to
Greater than or equal to
Between
Empty
Not empty</td><td>When you choose one of these operators, two date input fields appear, each with a popup calendar. Depending on the operator you select, you will enter a date (and potentially time) into none, one or the two fields. When you select Equals, Greater than, Less than, Not equal, Less than or equal to, or Greater than or equal to then you only enter a date into the first field. When you select Between, you enter two dates. If you select Empty or Not empty, then you do not enter any date values</td></tr>
<tr><td>During
After
Before
After or during
Before or during</td><td>When you choose one of these operators, you are presented with a number of date / time expressions which complete the filter. The list of valid expressions and their meanings is as follows. This table assumes that today's date is Sunday, February 20th 2015 and the fiscal year setting of your installation starts on January 1.
<table>
<tr><th>Title</th><th>Data dictionary field name</th><th>Expression resolves to</th></tr>
<tr><td>Last 4 weeks</td><td>EVDTF_LAST_4_WEEKS</td><td>January 25th 2015 - February 14th 2014</td></tr>
<tr><td>Last 7 days</td><td>EVDTF_LAST_7_DAYS</td><td>Febraury 13th 2014 - February 19th 2014</td></tr>
<tr><td>Last fiscal quarter</td><td>EVDTF_LAST_FISCAL_QUARTER</td><td>October 1st 2014 - December 31st 2014</td></tr>
<tr><td>Last fiscal year</td><td>EVDTF_LAST_FISCAL_YEAR</td><td>January 1st 2014 - December 31st 2014</td></tr>
</table></td></tr>
</table>

	Last fiscal quarter to date *	EVDTF_LAST_FQ_TO_DATE	October 1st 2014 - November 20th 2014
	Last fiscal year to date *	EVDTF_LAST_FY_TO_DATE	January 1st 2014 - February 20th 2014
	Last month	EVDTF_LAST_MONTH	January 1st 2015 - January 31st 2015
	Last month to date	EVDTF_LAST_MONTH_TO_DATE	January 1st 2015 - January 20th 2015
	Last quarter	EVDTF_LAST_QUARTER	October 1st 2014 - December 31st 2014
	Last quarter to date	EVDTF_LAST_QUARTER_TO_DATE	October 1st 2014 - November 20th 2014
	Last week	EVDTF_LAST_WEEK	February 8th 2015 - February 14th 2015
	Last week to date *	EVDTF_LAST_WEEK_TO_DATE	February 8th 2015 - February 13th 2015
	Last year	EVDTF_LAST_YEAR	January 1st 2014 - December 31st 2014
	Last year to date	EVDTF_LAST_YEAR_TO_DATE	January 1st 2014 - February 20th 2014
	Next 4 weeks	EVDTF_NEXT_4_WEEKS	February 22nd 2015

			- March 21st 2015
	Next 7 days	EVDTF_NEXT_7_DAYS	February 21st 2015 - February 27th 2015
	Next fiscal quarter	EVDTF_NEXT_FISCAL_QUARTER	April 1st 2015 - June 30th 2015
	Next fiscal year	EVDTF_NEXT_FISCAL_YEAR	January 1st 2016 - December 31st 2016
	Next month	EVDTF_NEXT_MONTH	March 1st 2015 - March 31st 2015
	Next quarter	EVDTF_NEXT_QUARTER	April 1st 2015 - June 30th 2015
	Next week	EVDTF_NEXT_WEEK	February 22nd 2015 - February 28th 2015
	Next year	EVDTF_NEXT_YEAR	January 1st 2015 - December 31st 2015
	This week to date	EVDTF_THIS_WEEK_TO_DATE	February 15th 2015 - February 20th 2015
	This fiscal quarter	EVDTF_THIS_FISCAL_QUARTER	January 1st 2015 - March 31st 2015
	This fiscal year	EVDTF_THIS_FISCAL_YEAR	January 1st 2015 - December 31st 2015
	This fiscal quarter to date *	EVDTF_THIS_FQ_TO_DATE	January 1st 2015 -

			February 20th 2015
	This fiscal year to date *	EVDTF_THIS_FY_TO_DATE	January 1st 2015 - February 20th 2015
	This month	EVDTF_THIS_MONTH	February 1st 2015 - February 28th 2015
	This month to date *	EVDTF_THIS_MONTH_TO_DATE	February 1st 2015 - February 20th 2015
	This quarter	EVDTF_THIS_QUARTER	January 1st 2015 - March 31st 2015
	This quarter to date	EVDTF_THIS_QUARTER_TO_DATE	January 1st 2015 - February 20th 2015
	This week	EVDTF_THIS_WEEK	February 15th 2015 - February 21st 2015
	This week to date *	EVDTF_THIS_WEEK_TO_DATE	February 15th 2015 - February 20th 2015
	This year	EVDTF_THIS_YEAR	January 1st 2015 - December 31st 2015
	This year to date	EVDTF_THIS_YEAR_TO_DATE	January 1st 2015 - February 20th 2015
	Today	EVDTF_TODAY	February 20th 2015
	Yesterday	EVDTF_YESTERDAY	February 19th 2015

* These expressions are not commonly used. If you require to use these, ask your administrator to turn them on within the data dicationary by setting the **Filter Criteria** of the expression fields to *Yes.*

Querying for Multiple Issue Numbers (ID's)

On the Search/Report screen, you can type multiple issue ID's into the Issue ID field. Separate these by a semicolon ';'.

Querying for Null or No Values

There are occasions when it is useful to be able to search for a null value, or the absence of a value. For example, you may want a report where the filter is to be "show me all the records that have an empty customer field". If the field is a list field, you can select the entry * **None** *. If the field is a text field, however, you can enter the character string **{null}**, to signify that you are looking for a null.

Querying with User Name Fields

User fields have two options related to their ability to search, using the selected value or values as filters. First, there is an entry within the search list, * **Current User** *. When this entry is selected, the name of the user currently signed in is used as the filter value. If your administrator has enabled the option, there may also be an entry in the list, * **Include Inactive Users** *. By default, each list of users only includes activated users. When you select this option, the screen refreshes and the user list will include both active and inactive user names. If your installation uses pop-up selection for users, a checkbox will allow any search you make, to include inactive user names.

Querying with Checkbox Fields

Checkboxes are odd in their behavior. This is because you, the user sees them as *unchecked* and *checked*. However, the underlying databases upon which ExtraView relies also sees them as not being set at all. To the databases, this is different value, termed a "*null*" value. Therefore checkboxes have three potential values, *null*, *unchecked* and *checked*. As far as possible, ExtraView treats the *null* value as being the same as *unchecked*. However, once a checkbox is *checked*, and then subsequently *unchecked*, its value remains as *unchecked* and never goes back to *null*. Querying for a value of *unchecked* within a checkbox, will also include looking for the *null* value.

Runtime Replacement Filters

Both Container Reports and Dashboard Reports provide the opportunity to run multiple reports that give a single, combined output. Each individual report within Container Reports and Dashboards may, and probably will, have their own filters. However there are times where it can be useful to apply a single set of runtime filters to all the reports. Container Reports and Dashboard Reports give the opportunity to provide runtime replacement filters that are applied to all the reports on their output.

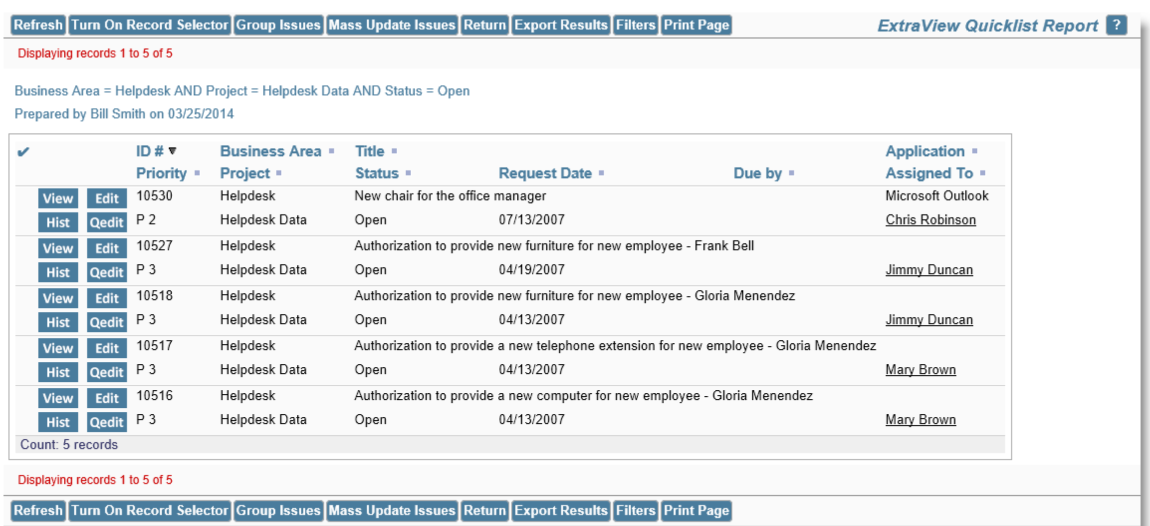
For example, you might want to apply a runtime replacement filter that applies the same date range to all the output, or apply a filter that provides only results from a specific product within the output.

When you specify runtime replacement filters within a Dashboard Report or Container Report, they will replace filters for the same field within the individual reports that they contain. If a runtime replacement filter at the Dashboard or Container report level does not appear within the contained report, it will have no effect. Further, it is not possible to specify conjunctions for the global filters - they simply replace filters for the same field within the contained reports. The runtime replacement filters are always displayed in expanded mode, allowing you to make multiple selections within a field.

Tip: A typical use case might be to create a dashboard that contains several reports about all your products, but you want to filter on the report output by a single product. You cannot select a runtime replacement filter with a value similar to *Product = Any*, but you can select all the product values in the list and store that as your filter. Then, after viewing the dashboard, you can select a new filter value that is either just one, or a selection of products.

Quicklist Reports

Quicklists are reports where the format (i.e. the fields that are displayed) is prepared by your administrator. Typically this report is designed to show you the most important and most frequently accessed fields. Selecting **Run Quicklist Report** and pressing the **Go** button will generate a report using the filters selected on the screen in the Query Filter section. The resultant report can be sorted by any of the fields displayed, with a single mouse click. Quicklists are ideal for selecting a group of records for further examination. For example, a manager might want to create a Quicklist of newly submitted issues, and then view or edit each in turn, in order to assign them to the appropriate person. Additionally, a manager could create a Quicklist of all the issues with an Open status, in order to see the average number of days in status for purposes of assessing efficiency or resource allocation.

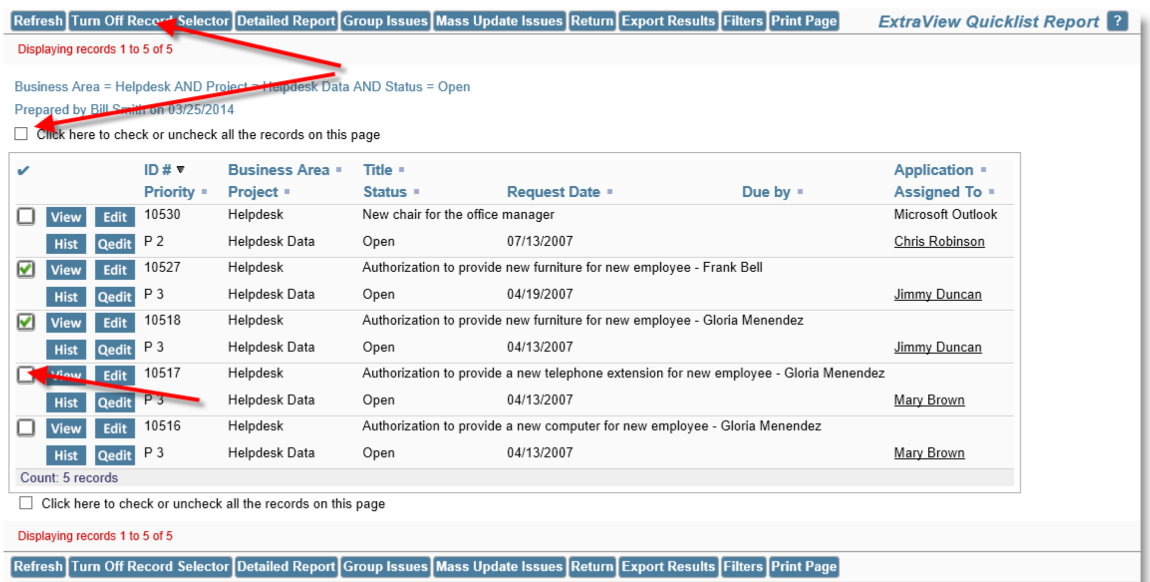


Quicklist Report

Quicklist reports may be sorted on any field in the title, by clicking on the title. When you first click on a field, the report is resorted, using the field you selected in an ascending order. Clicking on the title a second time will resort the report again, this time using the field in a descending order. If you sort on one field, then choose a different field to sort the report on, the first field is still used in the sort order, but secondary to the field you just clicked on. If your administrator has enabled the option, a button named **Turn On Record Selector** will be on the menu bar of the Quicklist report. The function of this button is to allow you to see a selector by each record on your Quicklist report. When you use the selector to choose records from the Quicklist report, you can then perform one of the following mass operations on the selected records:

- Produce a Detailed Report with the selected records
- Perform a Mass Update of the selected records
- Export the results to local file on your computer, in a variety of formats

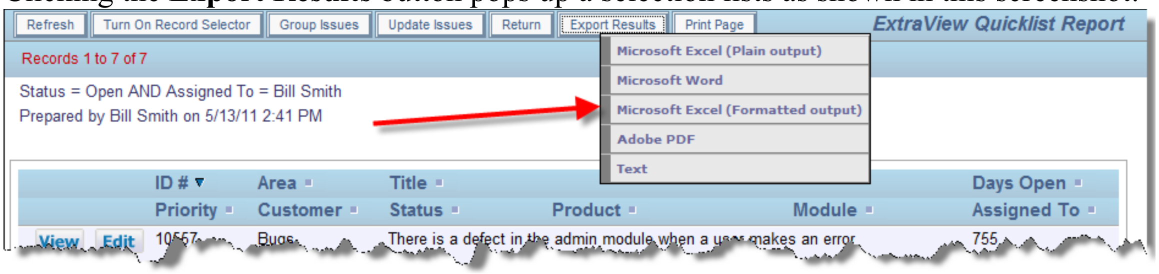
View other areas of this guide for information on each of these features. Turning on the record selector alters the Quicklist report by displaying a checkbox by each record, as shown on the following screenshot. Click on the checkbox to select each record. You can turn off the record selector with the button **Turn Off Record Selector** on the menu bar. To execute one of the mass operations, simply click on the appropriate button on the menu bar. You may also select all the records on the page by checking the box by the prompt **Click here to check or uncheck all the records on the page**.



Quicklist record selector

Exporting Results

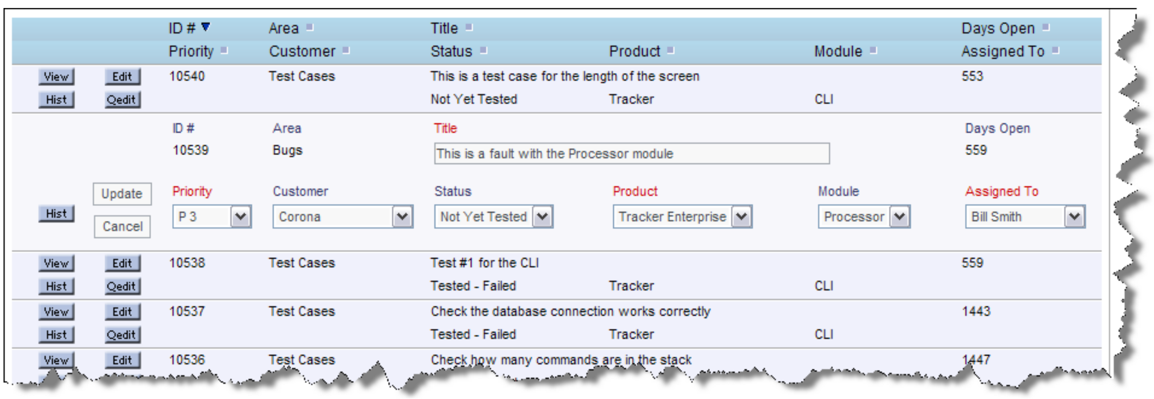
Clicking the **Export Results** button pops up a selection lists as shown in this screenshot:



Simply click on the output format you would like to save the results within, and a local file will be created on your computer.

Quickedit

Many Quicklist reports will have a Quickedit button. This allows you to update any of the fields on the report, without entering the *Edit* screen. You may enter Quickedit for as many items as you like.

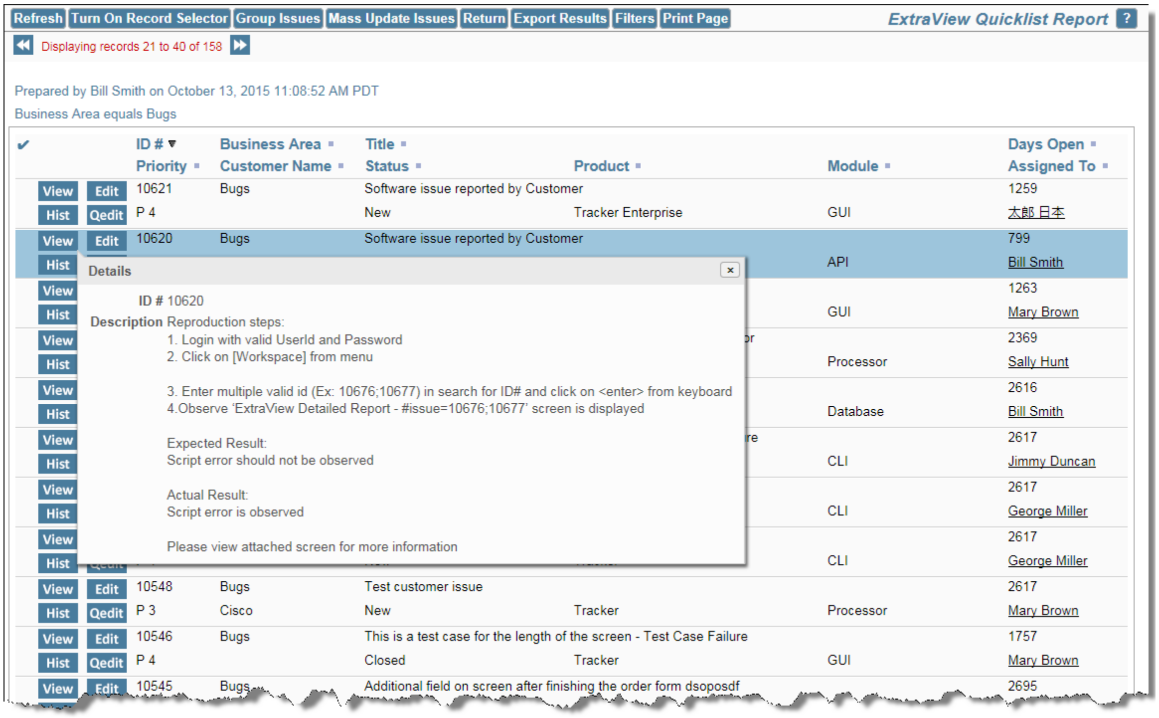


Quickedit mode

When you press the **Update** button within a Quickedit session, all rules and validations are performed, exactly as if you were in the *Edit* screen. Therefore, if a field becomes required as part of your update, and the field is not on the Quicklist layout, then a window pops open and asks you to enter a value for the missing field.

Hover Text Popups

Your Quicklist reports may have been configured with hover text. This is the content of specific fields that your administrator allows you to see when you hover your mouse over the **View** button, without clicking the button. This is often a shortcut to viewing the entire issue. A popup appears, with the contents of the fields that were configured. A typical hover text popup looks like this:



Detailed Reports

Detailed Reports produce more details than the Quicklist, and are configured by your administrator. Typically, this report will give you access to view most fields within a issue. Selecting **Run Detailed Report** and pressing the **Go** button will generate a report using the filters selected on the screen in the Query Filter section. Like Quicklist Reports, Detailed Reports typically also give you the ability to click into edit mode to edit the issue, assuming you have permission. They may also have other buttons to access issue history, or to delete the issue.

	ID #	Title		Area
Edit	10373	Notifications are not sent upon submission.		Bugs
Date of Last Status Change	**Date Created**	**Last Modified**	**Days in Status**	**Days Open**
4/10/07 3:48 PM	10/4/05 8:21 PM	4/10/07 3:48 PM	1628	2180
Originator	**Last Changed By**	**Assigned To**	**Product**	**Module**
Bill Smith	Bill Smith	Jimmy Duncan	Tracker Enterprise	GUI
Category	**Status**	**Priority**	**Severity**	**Platform**
Software	Fixed	P 2	Manufacturing Defect	Linux
Release Found	**Needs Doc Change**	**Resolution**	**Privacy**	**Screenshot**
	No	Implemented	Private	

History

New 10/4/05 8:21 PM Bill Smith	→	Open 7/16/06 10:47 PM Bill Smith	→	Fixed 12/18/06 11:37 AM Bill Smith	→
Closed 12/22/06 10:13 AM Bill Smith	→	Duplicate 12/22/06 10:16 AM Bill Smith	→	Fixed 4/10/07 3:48 PM Bill Smith	

Description

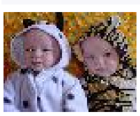
Notification emails are not sent to CC recipients upon selection of the Submit button.

Comments

4/10/07 3:48 PM Bill Smith
This comment will be added to all the related issues

12/22/06 10:13 AM Bill Smith
Duane Test

Attachments

	Thumbnail	File Description	File Name	File Size	Created By	User
View		Notification Screenshot	DSC01306.JPG	1,640,118	Bill Smith 10/4/05 8:22 PM	Bill Smith 10/4/05 8:22 PM

Manually Added Related Issues

Related Test Cases

Related Customer Issues

Sample Detailed Report

Other options on the menubar of the Detailed Report are identical to those of the Quicklist Report. Click here for details of these options.

Output & Query Options

Report Destination

This select box allows you to control the destination of the report. The choices are:

- Output to saved format - this outputs the report to the format saved with the report. Note that for Quicklist and Detailed reports, this is always Browser output
- Output to Browser
- Output to Microsoft Excel spreadsheet (plain output)
- Output to Microsoft Excel spreadsheet (formatted output)
- Output to Microsoft Word document
- Output to Adobe PDF document
- Output to text file

Note that some reports (such as charts) can only be output to the browser window or to a PDF document. Calendar reports and planning reports can only be output to the browser window. Note that when you output reports to Microsoft Excel, there is an option to output the plain, raw data with no formatting or to output the data with formatting. The formatted output will only work with the 2003 version of Microsoft Excel or later. There is no support for formatted output with earlier versions. When you are outputting the plain data, no totals or statistics are generated. This allows you to create your own totals and formulae, as you need, within Excel. If your data in ExtraView contains double-byte characters (this normally means Asian languages) then you should set your Microsoft Office character set to **windows-1250** within your personal options.

Also note that you cannot output some field display types to Excel, as there is no mechanism within Excel that would allow you to view these fields. For example, you cannot output attachments, HTML Area fields, document fields, and image fields to Excel.

Records per Page

You can choose to output a different number of records for the report on each page. These numbers have been defined by the system administrator, but by default are *20, 100, 500* and *unlimited*. If you are outputting the results to a browser, then you are able to page back and forward between pages of the report. If you are outputting to any other device, the report will display the number of records selected in this field. Note that ExtraView remembers the last entry in this field and will use the value for successive reports until you change it once again, except for an unlimited numbers of records. ExtraView does not remember this selection. Also, please note that your Administrator may have disabled the option to retrieve an unlimited number of records.

Note that the control of Records per Page only applies to reports directed to the browser, not to reports sent to Microsoft Excel, Microsoft Word or text. This is deliberate, as in use, it is typical to want all the records for a report exported at one time.

Query Options

- **Condensed / Expanded Query Filters** – When you are in Condensed mode each query filter on the screen allows a single selection. When you are in Expanded mode, each filter that has a display type of list or tab allows multiple selections. Note that you will only see these options if your administrator has granted you permission. This is discussed in detail below.
- **Standard / Advanced Query Screen** – When you are in Standard query mode, you see a range of query filters (either in Expanded or Condensed mode), as set up by your administrator. You select filters for the report by choosing from the various selection lists or entering text or numeric information. When you are in Advanced query mode, you create query filters one at a time. Standard query mode is quick and simple to use for straightforward searches, but Advanced mode allows more complex query filters to be built before running your report. Note that you will only see these options if your administrator has granted you permission.
- **Clear Filters** – Pressing this button clears all the query filters on the screen back to their initial state

Keyword Searching

Keyword searching allows you to perform searches on text data fields, documents and file attachments stored in your ExtraView database. There are two searching technologies used within ExtraView:

- The standard keyword search mechanism uses direct queries on the database to obtain results. The advantage is that there is no special setup needed by the administrator of your system. The disadvantage is that queries are relatively slow, especially on large databases.
- The Quickfind mechansim requires a small amount of setup by the administrator, but once set up is extremely fast to return results from your queries. It also has special properties in better use of wildcards, phrase search, and in the support of Boolean logic within your searches. This feature may not be turned on within your installation. If you are not sure, please ask your administrator as there is no way to tell from the user interface if Quickfind is enabled.

All searching for keywords is case-insensitive.

Using Keyword Search

There is an option to be able to search attached documents, as well as searching for keywords within the text of the issues in your database. If file attachment searching is enabled, the search box will look like:

Check the box to allow ExtraView to search the attachments in its database. Note that if you have a large number of attachments and / or the attachments are of a large size, and Quickfind is not enabled, the search is likely to take longer to finish. Also, note that the administrator may have restricted the file types through which you can search for keywords. For example, you will probably be allowed to search through Microsoft Word documents, but not through image files. In the same way, the administrator may have placed a limit on the total size of the attachments that can be searched, without warning the user.

Note: You cannot save a report that performs a keyword search with the option to search attachments. This is intended as a feature to be used on an ad hoc basis as opposed to being used for routine reporting.

Standard Search Mechanism

For efficiency, searching attachments works slightly differently if your underlying ExtraView database is Oracle or Microsoft SQL Server. The searching with an Oracle database is case sensitive, and the searching with Microsoft SQL Server is case insensitive. Your system administrator can tell you which database is being used, if you are not certain. This basic search mechanism has the following features:

- To search for a single word, in any of the text type fields within issues, simply enter the word within the keyword search field. For example, if you enter the word **picture**, then ExtraView will search for this word anywhere within the text of an issue. Finding a keyword within a field means that the search will look for all words that start with the text you enter. For example, if you enter the keyword **table**, then issues containing both **table** and **tabletop** will be found
- To search for multiple keywords enter them, separated by spaces. All the keywords entered must exist within the same field within an issue. For example, if you enter the words **picture frame** then ExtraView will search for the occurrence of both words within the same field within an issue. The same general rule about special characters as in searching for single keywords applies
- If you have four or more search words, then words that are a single character are dropped. If there are four or more words and all are only single characters, then only the first one is used. Also, if duplicate words are found in the search, then only one is used.

Quickfind Search

ExtraView's Quickfind technology allows especially fast searching for text within your installation when seeking keywords that may be spread through thousands of issues or file attachments. Quickfind's efficiency and speed comes from techniques that index the text and the file attachments you enter into your database. In addition to searching for text, the Quickfind technology may also be used to search for issue ID's, email addresses and URLs within issues. All searches executed using Quickfind are case-insensitive.

Searching for Single Words

To search for a single word, in any of the text type fields within issues, simply enter the word within the keyword search field. For example, if you enter the word **picture**, then ExtraView will search for this word anywhere within the text of an issue. Finding a keyword within a field means that the search will look for all words that start with the text you enter. For example, if you enter the keyword **table**, then issues containing both **table** and **tabletop** will be found. Keywords that you search for should not contain special characters (see below), with the exception of email addresses within fields, and with the exception of valid URLs.

Searching for Multiple Keywords

Enter the keywords, separated by spaces. All the keywords entered must exist within the same text type field within an issue. For example, if you enter the words **picture frame** then ExtraView will search for the occurrence of both words within the same field within an issue. The same general rule about special characters as in searching for single keywords applies.

Wildcard Searches

Within each specified keyword there may be either or both of the wildcard characters, ***** or **?**. This produces a wildcard search. At each position where a ***** exists, there may be zero or more characters in the string in the field for a match to occur. For example, **abc*def** matches a field value of **abcdef** or **abcxyzdef**. At each position where a **?** exists, there must be a single character in the string in the field for a match to occur. For example, **abc?def** matches a field value of **abcxdef** but NOT **abcdef**. Wildcards at the beginning of a keyword will invoke a lengthy search of all words within the database and should be avoided if possible. Wildcards may appear once or multiple times in a keyword, and they may appear in any or all of the keywords in a multiple keyword search.

Phrase Searches

A phrase search is used when a keyword is in either of three formats:

1. The keyword is surrounded by single or double quotes
2. The keyword contains special characters
3. The keyword contains token breaks

A phrase search of type 1 produces a hit when the exact keyword phrase inside the quotes is found in the field values. Basically, this means that the keywords in the phrase appear in the specified order and are separated only by special characters or spaces. For example, a phrase of **"abc def"** will match with a field value of **abc   def** or **abc-def** or **abc - - def**. Note that **-** is a special character. A phrase search of type 2 is converted to a phrase search of type 1 by replacing the special characters with spaces and surrounding the result with double quotes. Essentially, the special characters are replaced with token separators and the resultant phrase is used in the phrase search. A phrase search of type 3 is converted to a phrase search of type 1 by replacing all word breaks with a space character and surrounding the result with double quotes, if it is not already surrounded by double quotes. As an example, a string like **Fredまままま** gets broken into **Fred ま ま ま ま**, which consists of five words (Alphanumeric and Hiragana). Another example is **Fredキキキ**, which gets broken into **Fred キキキ**, which consists of two words (Alphanumeric and Katakana). As another example, **abc-def** will produce a phrase search of **"abc def"**. This would match a field value of **abc   def** or **abc-def** or **abc - - def**, but not **abcdef**. Terms in a phrase search may use the ***** and **?** wildcards. However, they are not permitted to appear at the beginning of any term used in a phrase search.

Special Characters

This refers to installations with Quickfind enabled only. The Quickfind special characters are:

```
+ - & | ! ( ) { } [ ] < > ^ " ~ * ? : \
```

Note that ***** and **?** are wildcard characters. Special characters are ones that Quickfind does not index and you cannot query for these characters, either as characters by themselves or when the character is part of a word, i.e. there is no space between the special character and an adjoining alphanumeric character.

Complex Queries

You can use Boolean operators within your keyword, to perform complex queries. To accomplish this, you use the following operators with the **AND**, **+**, **OR**, **NOT** and **-**. To indicate to Quickfind that you are entering a complex query, preface the query with the **#** character and ensure that the **AND**, **OR** and **NOT** are in upper case.

- **AND**

  The **AND** operator matches issues where both terms exist anywhere in the text of a single field within the issue. This is equivalent to an intersection using sets. The symbol **&&** can be used in place of the word **AND**. To search for documents that contain **abc def** and **def ghi** use the query:

  ```
  #abc def AND def ghi
  ```

  \+

  The **+** or required operator requires that the term after the **+** symbol must exist somewhere in a the field of a single issue. To search for documents that must contain **abc** and may contain **def** use the query:

  ```
  #+abc def
  ```

  OR

  The **OR** operator matches documents where both terms exist anywhere in the text of a single field within the issue. The symbol **||** can be used in place of the word **OR**. To search for documents that contain **abc def** or **def ghi** use the query:

  ```
  #abc def OR def ghi
  ```

  NOT

  The **NOT** operator excludes issues that contain the term after **NOT**. This is equivalent to a difference using sets. The symbol **!** can be used in place of the word **NOT**. To search for issues that contain **abc def** but not **def ghi** use the query:

  ```
  #abc def NOT def ghi
  ```

  Note: The **NOT** operator cannot be used with just one term. For example, the following search will return no results:

```
#NOT abc def
```

-

The **-** or prohibit operator excludes issues that contain the term after the **-** symbol. To search for issues that contain **abc def** but not **def ghi** use the query:

```
#abc def - def ghi
```

Searching Within Specific Fields

You can restrict which Extraview fields to search. You must know the ExtraView field name to perform this searching. To achieve this, you first enter the field name, then a **:** character, and then the term you are searching for. You can combine the specific field search with other complex search criteria. For example, you might want to search only the **SHORT_DESCR** field for the term **abc**. The syntax for this is:

```
#SHORT_DESCR:abc
```

Note that if you want to search for multiple words within a field, you need to repeat the field name. For example, to search the **SHORT_DESCR** field for the terms **abc** and **def** you would enter:

```
#SHORT_DESCR:abc AND SHORT_DESCR:def
```

Grouping Queries

Quickfind supports using parentheses to group clauses to form sub queries. This can be very useful if you want to control the boolean logic for a query. For example, to search for either **abc** or **def** and **ghi** use the query:

```
#(abc OR def) AND ghi
```

This eliminates any confusion and makes sure that **ghi** must exist and either term **abc** or **def** may exist.

Escaping Special Characters

Quickfind supports escaping special characters that are part of the query syntax. The list of special characters is:

```
+ - & | ! ( ) { } [ ] ^ " ~ * ? : \
```

To escape these character use the \ before the character. For example to search for (1+1):2 use the query:

```
#\(1\+1\)\:2
```

Fuzzy Searches

Quickfind supports fuzzy searches based on the Levenshtein Distance, or Edit Distance algorithm. To do a fuzzy search use the tilde ~ symbol at the end of a single word term. For example to search for a term similar in spelling to **roam** use the fuzzy search:

```
#roam~
```

This search will find terms like foam and roams. Note the use of the # at the beginning of the search term. An additional, optional parameter can specify the required similarity. The value entered is between 0 and 1, with a value closer to 1 only terms with a higher similarity will be matched. For example:

```
#roam~0.8
```

The default that is used if the parameter is not given is 0.5.

Proximity Searches

Quickfind supports finding words are a within a specific distance away. To do a proximity search use the tilde ~ symbol at the end of a phrase. For example to search for **abc** and **def** within 10 words of each other in a document use the search:

```
#abc def~10
```

Expanded Queries

The Expanded Query capability within ExtraView allows you to select multiple values from the available lists for a single search. For example, the Expanded Query would be helpful if you would like to run a report on *Open* and *Unassigned* issues that were originated by Bill Engineer or Sue Engineer. With the standard search screen, you can only search for one of the Statuses and one of the Originators. Your administrator may not have given you permission to use this feature.

- Note that when you select multiple values from a list, the search query uses the "*or*" operator between the different values.
- Additionally, the expanded query option allows you to choose *None* as an option in select lists.
- You can select any combination of filters with different fields.
- Expanded queries are available from the Search/Report screen and from the screens that create custom reports, summary reports and charts.

Allowed Values and Expanded Queries

Similar to Advanced Queries, allowed values do not operate within filters selected for expanded queries. You will see all parent and all child values in the filter lists for expanded queries.

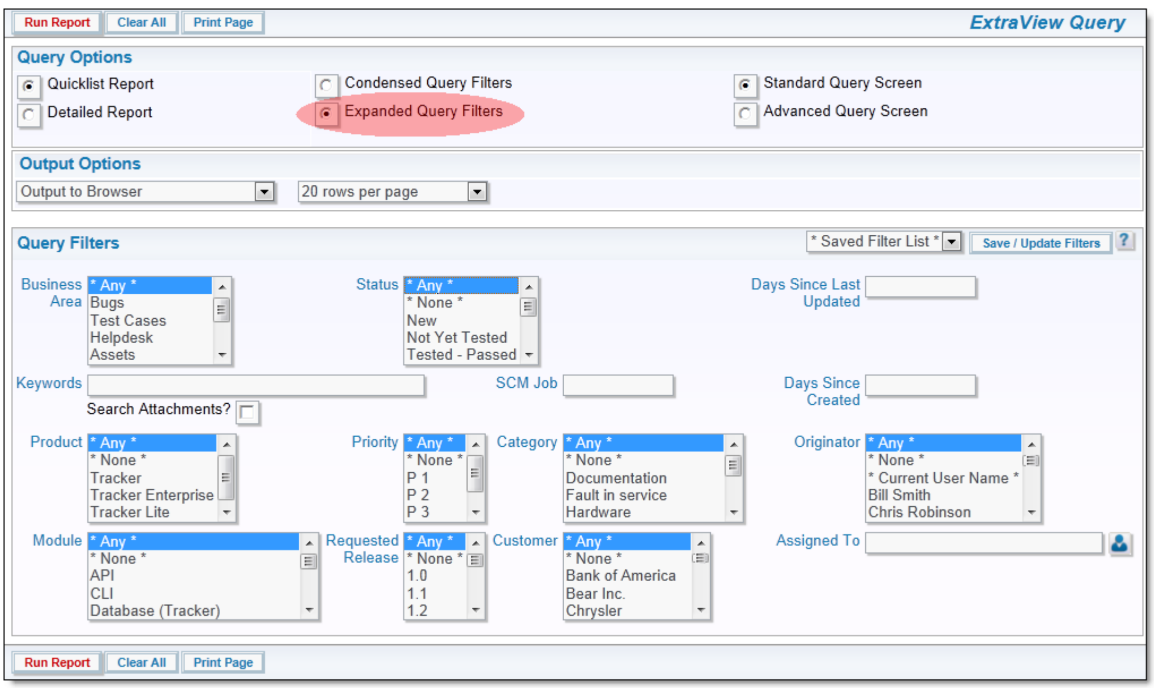
Using Expanded Queries

Expanded Query field

- Proceed to select your report parameters. If you are using a Windows operating system, you can select multiple values by pressing the control key and clicking the mouse button on each of the multiple values. If you are using a Unix operating system, simply click on each of the multiple values the same way you would click single values. If you are using a Macintosh, use the Apple command key.
- The above example is analogous to selecting the following filters, if you were using the advanced search mode, with condensed filters:

  Category equals Documentation or Category equals Software

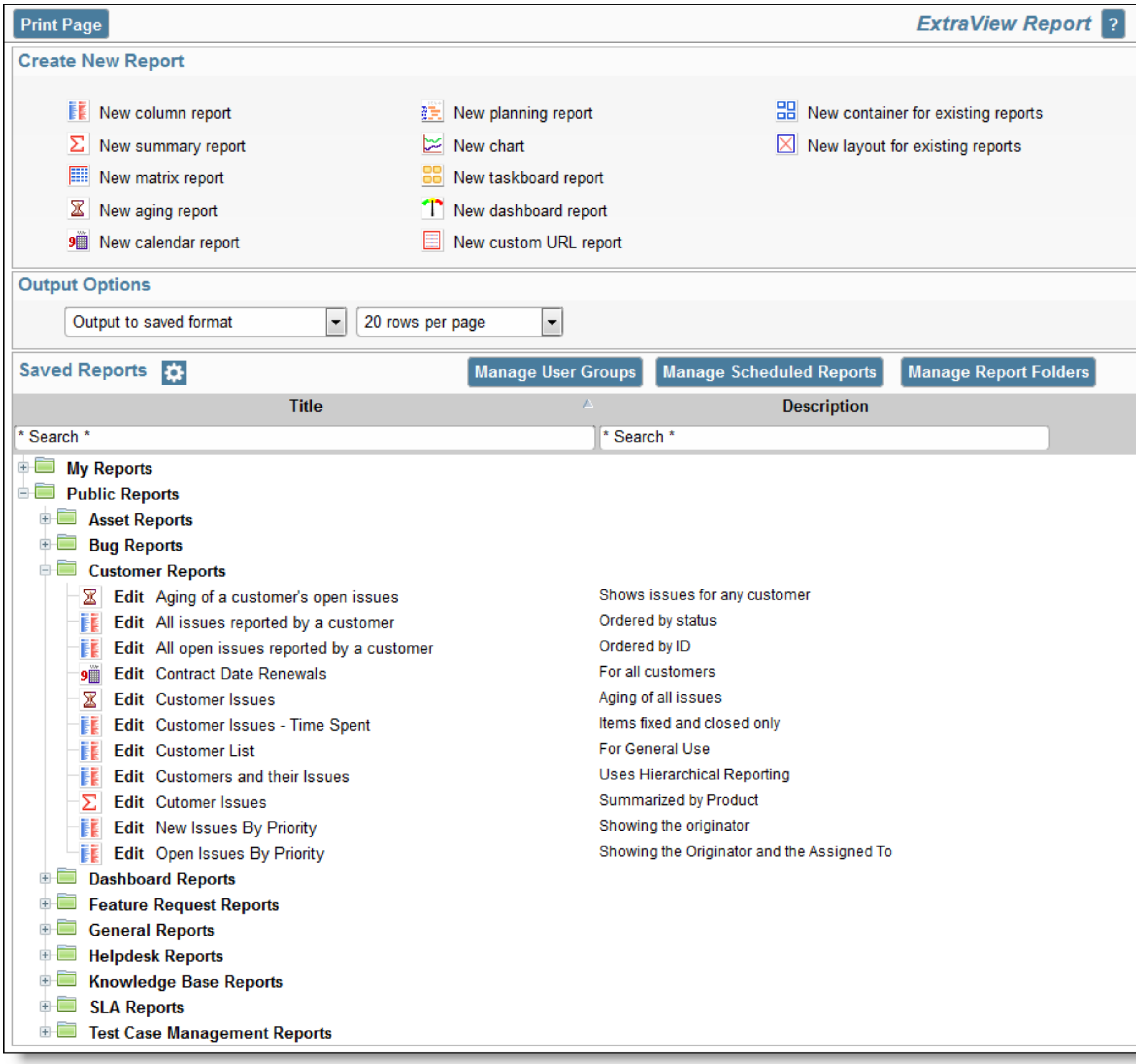
- After you have made all of your selections, use one of the standard reporting tools to view your results.
- With multi-valued select fields, there are two buttons which allow you to expand and to shrink the display size of the lists. This aids in selecting multiple value on long lists.



Expanded Query screen

Reporting

The ExtraView reporting feature offers the user a variety of different ways to report on, analyze and summarize the data within the database. After clicking the **Report** button on the navigation bar, users have the option of creating and running one of several report types; Column Report, Summary Report, Matrix Report, Dashboard Report, Charts and more. Reports can be created and saved for future use. If the administrator has granted you permission, the reports you create and save can be made available to all users; else the reports can be saved for your own personal use.

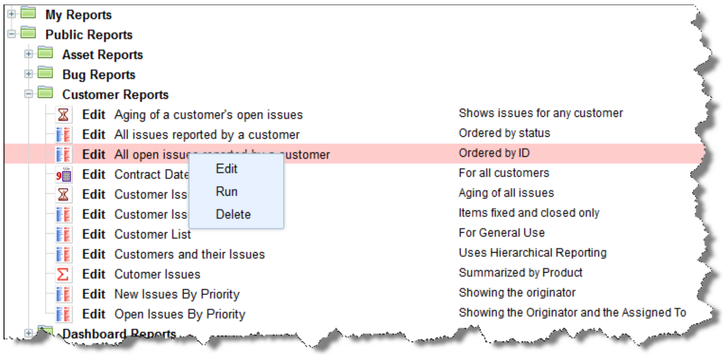


Sample Report screen

Reports can be manipulated on the report screen in a variety of ways:

- **Drag-and-Drop** - You may drag a report from one folder to another report folder, assuming you have permission to write to the destination folder. You may also drag a complete folder to another location

- **Double-Click on the Report Icon** - When you double-click on the report icon, you can alter the name or title of a report, without the need to enter the report editor
- **Right-click on Report Name or Title** - When you right-click on a report, you see a popup menu that allows you to Edit, Run or Delete the report



Creating New Reports

To create a new report, you have the following report options:

- **New Column Report** - Select the columns you want to display and which filters to set. For more information regarding Column Reports, please see here
- **New Summary Report** - This allows you to design a report which will summarize on up to 10 fields, providing a total at each level. There is an option to provide additional statistics for each report level For more information regarding Summary Reports, please see here
- **New Matrix Report** - You can select two fields as axes for the report, and see a count of all the issues at each coordinate For more information regarding Matrix Reports, please see here
- **New Aging Report** - This provides a report that shows the time issues have spent within different statuses For more information regarding Aging Reports, please see here
- **New Calendar Report** - These allow you to represent issues upon a calendar, with a date within each issue being used For more information regarding Calendar Reports, please see here
- **New Planning Report** - Planning reports work with parent and child related issues. The child issues use a start and an end date on a calendar, and can be dragged to alter the dates. Visually, you are looking at many child issues on the report, and can therefore move the start and end dates of any issues to plan many interacting tasks For more information regarding Planning Reports, please see here
- **New Chart** - Charts provide the ability to create pie, line, bar, and area charts For more information regarding Charts, please see here
- **New Taskboard Report** - Ths report type allows issues to be represented as tiles on a background. The tiles represent tasks and can be dragged to new positions on the background. In this way, you can easily manipulate any number of issues to better organize work schedules and manage tasks For more information regarding Taskboard Reports, please see here
- **New Dashboard Report** - Dashboard reports allow you to organize many reports into a single report. Typically dashboards will be shared to show key metrics that drive your organization For more information regarding Dashboard Reports, please see here

- **New Custom URL Report** - These give access to run custom reports, and to place the contents of a URL external to ExtraView within your workspace or ExtraView screen For more information regarding Custom URL Reports, please see here
- **New Container Report** - Container reports allow you place a number of reports together within a single PDF document that can be shared For more information regarding Container Reports, please see here
- **New Layout** - Layouts can be used to summarize information and place the results within Container reports For more information regarding Layouts, please see here

Common Report Functions

Saving Reports

Reports can all be saved so that they may be run at any time in the future.

Assuming you have been granted permission by your administrator, there are 3 potential areas into which you can save a report:

- The **My Reports** area, where only you have access to the reports that are saved
- The **Public Reports** area, where reports created for everyone's use are saved. You may or may not have access to edit these reports
- The **Shared Reports** area, where you place reports that you want to share with a report group. A report group is an arbitrary group of users and only members of the group can see and run reports shared within their group. Either you or another user may have created a shared report. The user's name who created the shared report is appended to the report title.

If a report already exists when you click the **Save** button, you are prompted to overwrite the existing report. If you click the **Save As** button, you will be saving the report with a new name and/or description.

- Reports have a title, up to 100 characters in length. This is required.

  There is a button to the right of the **Report Title** that appears when you are editing an existing report. When you place your mouse over this button, you will see who created the report, who last updated the report and the dates when these actions occured. This is most useful when managing public reports

- Reports have a description, up to 100 characters in length. This is required

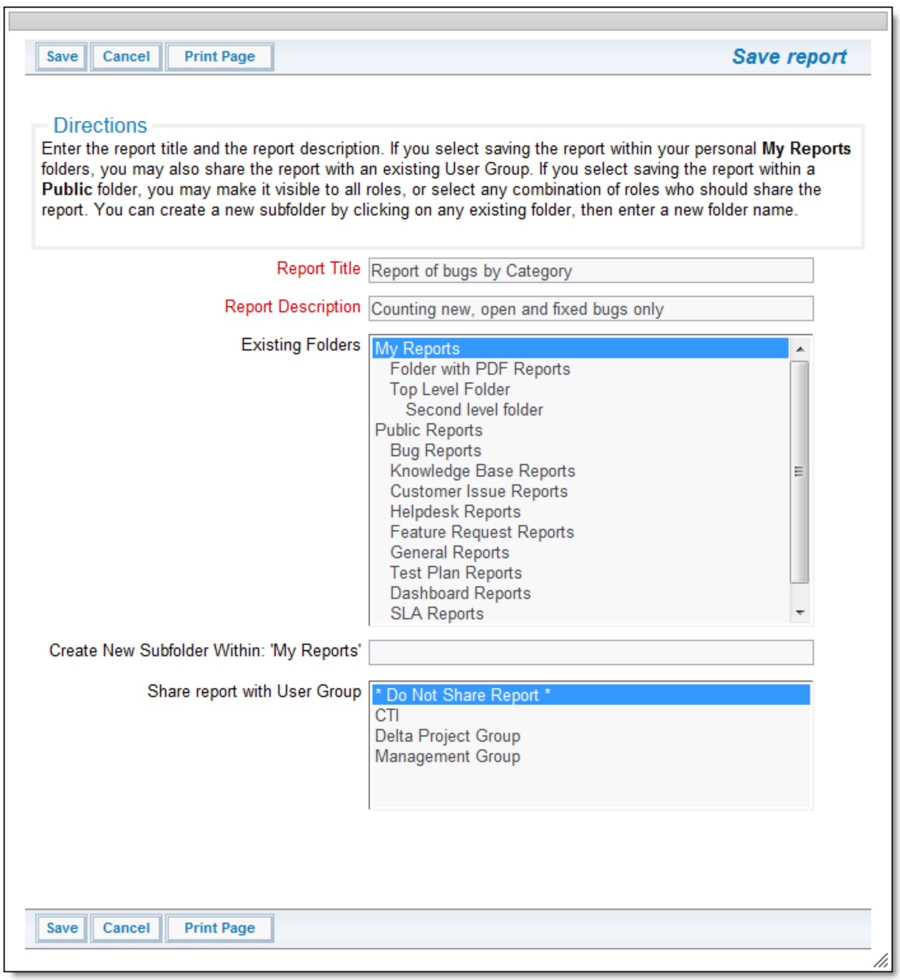
- When you click on **Save** or **Save As**, you will see the following dialog box, asking you to confirm the Report Title and Description, and giving you the opportunity to save the report for personal use within the **My Reports** folder, or for public use, within the **Public Reports** folder.

  In both cases, you can place the report into an existing report folder by selecting the folder name within the **Existing Folders** selection list, or you can create a new folder by providing its name in the appropriate field.

If you save the report for personal use, you can share the report with individual users who are members of a **User Group**. **User Groups** are created and maintained on the **Report** screen.

If you save the report as a public report, you can make it truly public, with all users having access to the report, but you can also share the report with one or more user roles. To allow multiple user roles to view the report, use the CTRL key and the mouse to select each of the roles who are to be given permission to view the report.

Note that the administrator may not have given you privileges to store public reports or reports for different user roles. The administrator may also have used a setting that ensures that you have a minimum number of filters to be used for any report. On large databases, this is a way in which it is ensured that a single report does not attempt to download a huge number of issues, consuming significant resource on the server.



Saving a report

- A user cannot save more than one report with the same title that is for personal use, and a report cannot be saved for global use, if a report with this title already exists

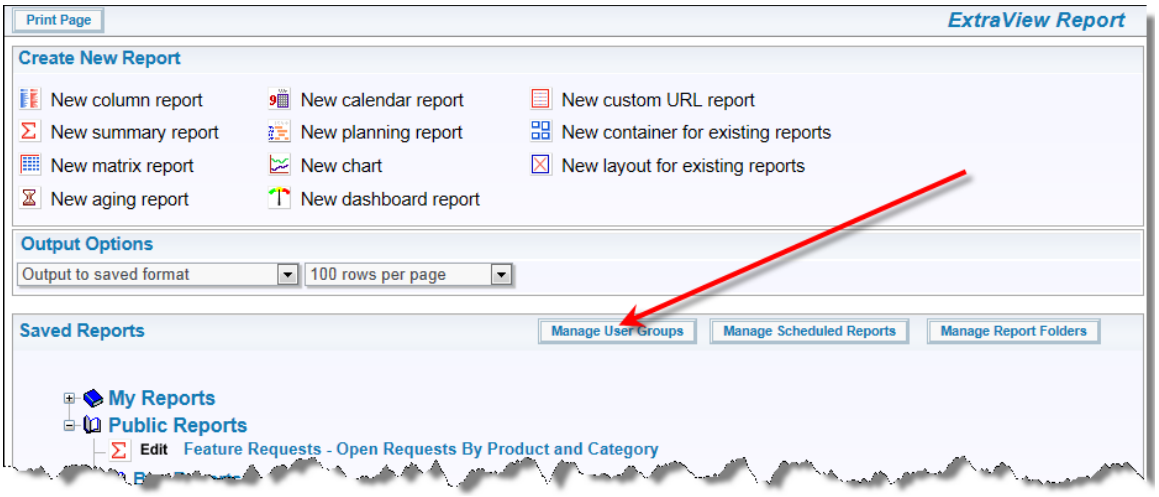
- If you use the **Save As** option to create a copy of the report with a different name and/or title, any report schedule that has been created for the original report is not saved to the new report, to avoid having the same report output scheduled twice. A schedule can be set up for the newly created report in the normal way.

Sharing Reports

Provided the administator has enabled this feature, reports may be shared between arbitrary groups of users. This is contrasted with public reports which all users can see, and reports saved for user roles, which all members of a user role can see.

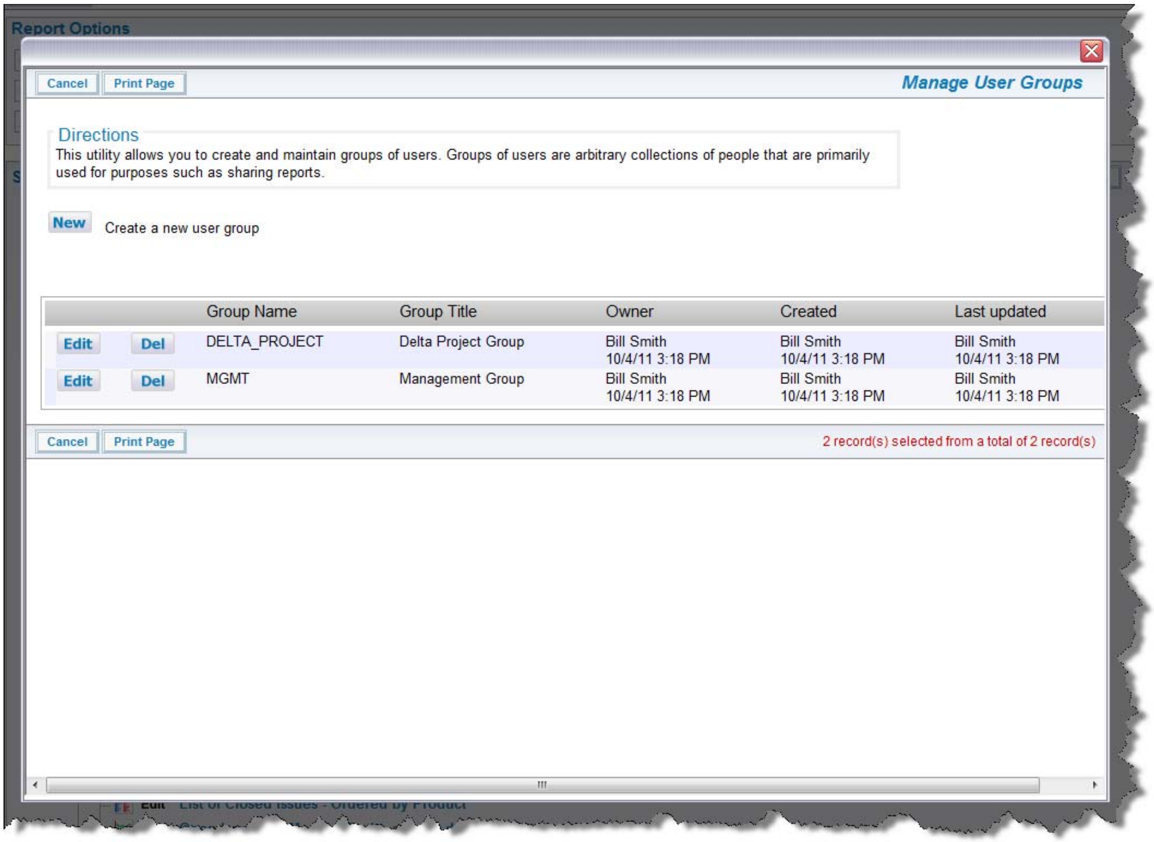
Setting up user groups

User groups are set up from the Report screen as shown here:



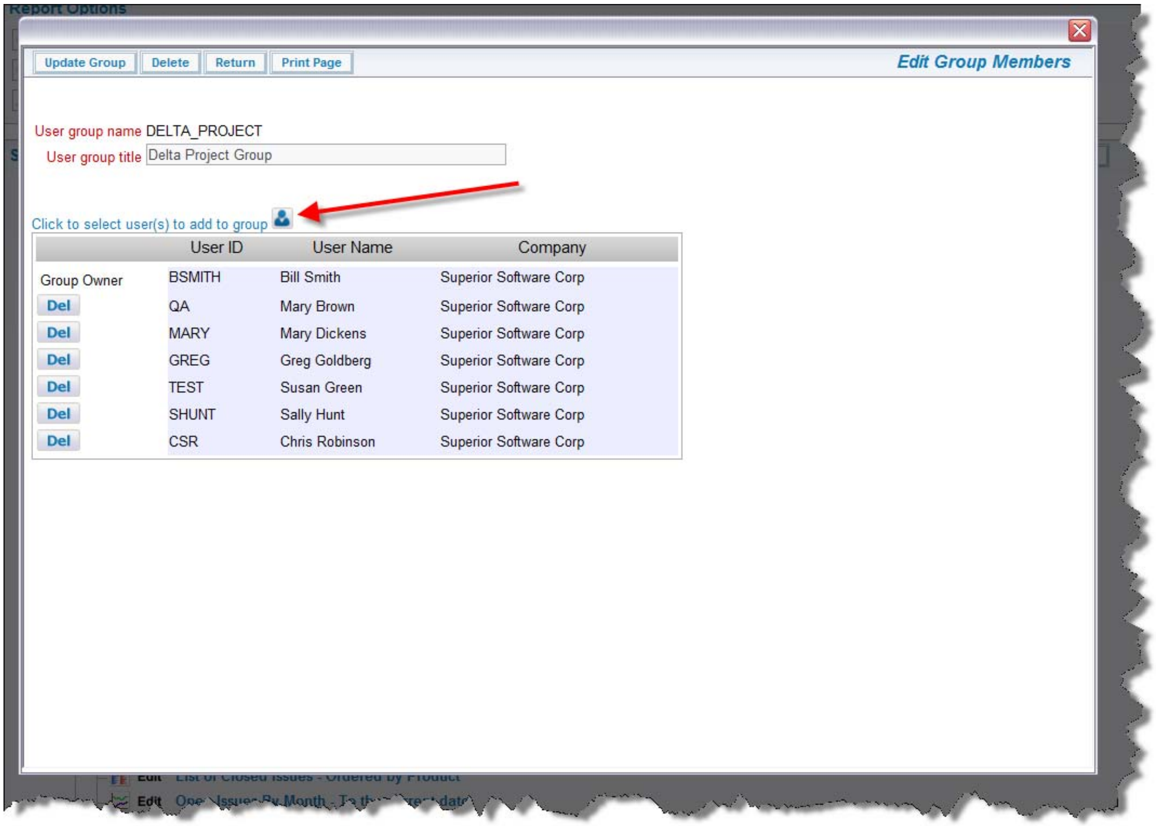
Managing user groups from the Report screen

When a user clicks the button, they are given a screen where they will see all the user groups they have set up, and where they can create new user groups, and where they can administer exactly which users belong to each of their groups. The user who creates a group is termed the **owner** of the user group.



The user group popup

From the above screen, the user can either create a new user group, alter the members of an existing user group, or delete an unneeded user group.

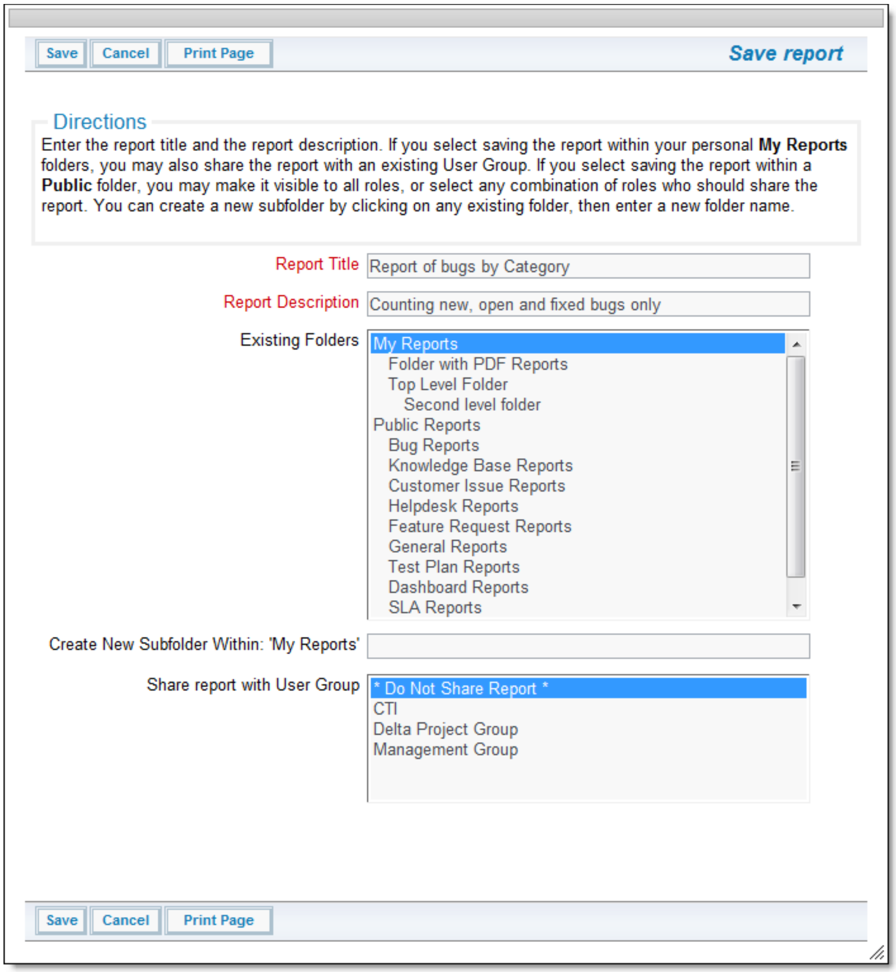


Editing the members of a user group

The arrow in the above screen point to the button that is used to add users to the group.

Utilizing user groups

When you save a report, the popup window presents a list of all the information required to save and share your reports.



Editing the members of a user group

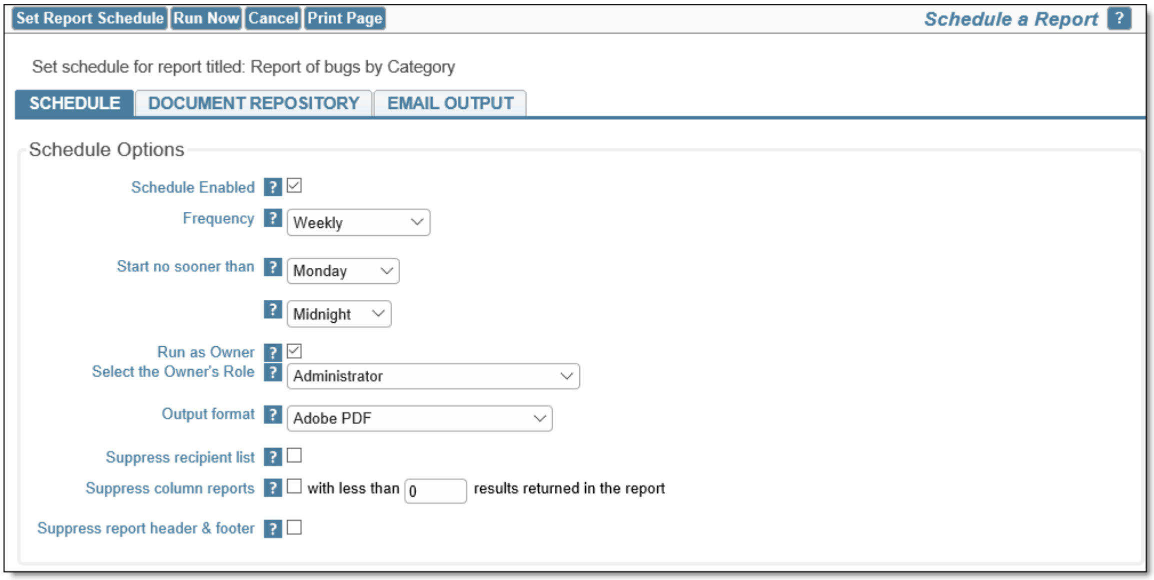
A list of user groups are displayed when you elect to save a report as a personal report in the **My Reports** folder. If you choose a user group, then the report will be visible to all members of the user group.

Scheduling Reports

Reports can be set up to be generated automatically on a time schedule, and delivered to yourself and other users via email. The scheduler may also send reports directly to the Document Repository. Your administrator will have enabled the scheduling of reports for the entire system, and assuming you have been given permission, you will be able to schedule your own reports to be received by yourself and other users of the system.

You can send a report to the document repository at the same time you send it to users on the schedule or you can set up a schedule to perform just one of these functions.

Column reports, Summary reports, Matrix reports, Charts and Container reports may be scheduled and delivered via email. Note that other report types may not be scheduled - typically because they require interactivity with the user. Also note that fields with drilldown capability, such as the **Attahments**, **Document Fields** and **Image fields** are removed from the output of a scheduled report. Before you schedule a report, you must first save it. After saving, you may edit the report and you will see a button in the menubar with the label **Schedule Report**. When you click this button, you will see a screen similar to:



Setting the schedule for a report

Note that if you use the **Save As** option on a report, any schedule that was set up on the report is not copied to the new report. It is unlikely that the user would want to send the same report output on two identical schedules. The functions of the entries on this screen are as follows:

Entry	Purpose
Schedule Enabled	You may enable and disable the schedule for a report. If you disable the schedule, ExtraView suspends the sending of future reports on this schedule, but the schedule details are maintained.
Frequency	You may select one of Hourly, Daily, Weekly, Monthly on a day, Monthly on a date, Quarterly on a day, Quarterly on a date, Yearly on a day and Yearly on a date.
Start no sooner than	The selections here will change according to your choice of frequency. Note that the report may not be sent precisely on the time you select. If many users have scheduled reports at the same moment, then ExtraView queues these and sends them out one after the other. This avoids swamping the server and degrading the performance to all users while the reports are being prepared and sent. Note that the time selected is the time in the schedule owner's own time zone
Run as Owner	When **Run as Owner** is checked, the report will be run once as the owner and sent to all recipients, using the role selected in the next option. If this is not checked, the report is run as each recipient and sent to them individually. Note that only roles that the owner can select are available as choices.
	By default the current role of the user creating the report is selected. However, there may be reasons to run the report as a different role, including the role of the

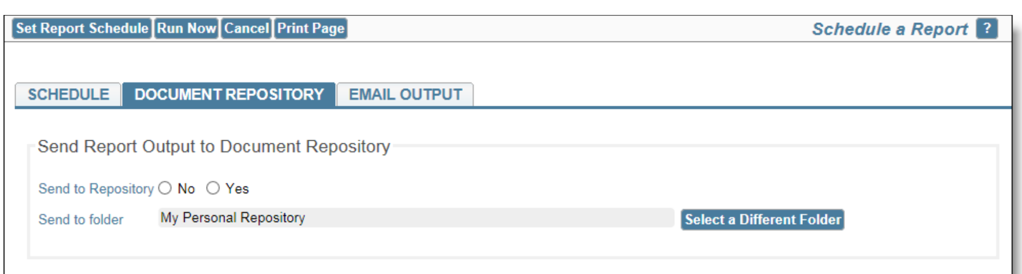
Select the Owner's Role	owner at the time the report is run - this is the choice * **Owner's Current Role** *. For example an *Administrator* may want to set up a schedule, but send out the report using the permissions of the *Quality Assurance* role. If you are not running the report as the owner, then this select list does not appear
Output format	Scheduled reports are sent as attachments to the email that the recipient receives. You can choose to send the attachment as either a text file, a Microsoft Word file, a Microsoft Excel file, an HTML file or an Adobe PDF file. Note that the links to many functions that appear within the same report created within a browser are removed, as are images. This is because these links and images rely on the user being signed on to ExtraView when they are utilized. Note that the output format you select for a scheduled report overrides the saved output format for any report. This allows you to choose a different format for the scheduled output, as opposed to running the report within your own browser.
Suppress recipient list	This allows the report scheduler to suppress the names of all the recipients who receive the report.
Suppress reports	By default, ExtraView will always generate and send a scheduled report to all the recipients. If this option is selected, then the entire email is suppressed if there are less than the number of rows on the report. A zero implies that the report is suppressed if there are no results. It is worth noting that if the scheduled report is being prepared for each recipient, as opposed to being prepared once and sent to all recipients, then the report may or may not be generated for each individual user, according to the filters used on the report, such as privacy group. The administrator will have set up the options that enable or disable this functionality.

Once you have filled in the information, you click on the **Set Report Schedule** button in the menubar of the popup window to save your schedule.

Sending Report Output to the Document Repository

This tab sets up the location of the output to which the output report document will be sent when the scheduler runs the report. The document repository is accessed via the **Reports** screen.

No output to the document repository is sent, unless the **Send to Repository** button is set to *Yes*. There is the capability to send the report to either a personal folder within the respository, or to send the document to a shared public folder. Click on the **Select a Different Folder** button to select a different destination folder from the one displayed.



Setting up output to the document repository

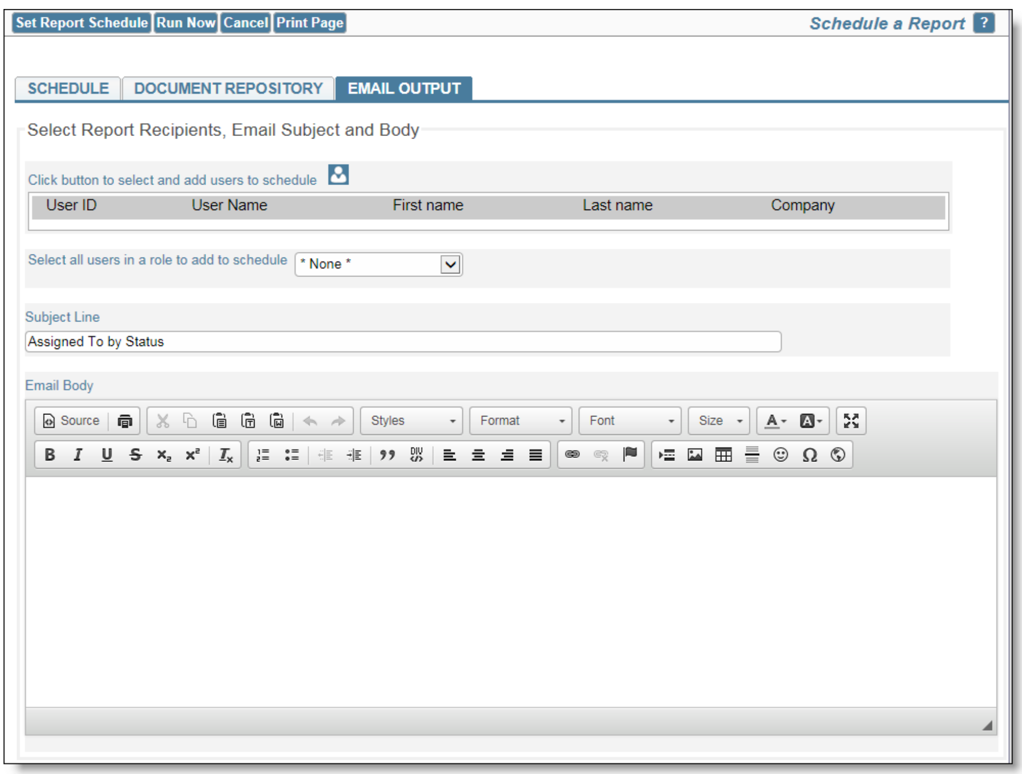
To select a different folder, simply click on its name in the folder list. You can use a mouse right-click on a folder to create a sub-folder within there. Right-click mouse actions also allow you to delete empty folders. Double-click on the folder title to edit its name.

Selecting a document repository folder

More information about the Report Repository can be found here.

Setting Up Email Delivery of the Scheduled Report

Click the **Email Output** tab to setup the recipients of the report, as well as the email subject and email body that will accompany the scheduled report output.



Selecting recipients for a report

Use the **Click button to select and add users to schedule** button to add users to the schedule, or use the **Del** button to remove the user from the schedule. You may only schedule reports to be delivered to licensed ExtraView users, not to any person through an email address. However, it is permissible to schedule a report for delivery to an ExtraView *guest* user so if you need to deliver a scheduled report to a person who is not an ExtraView user, ask you administrator to create a *guest* account with appropriate permissions.

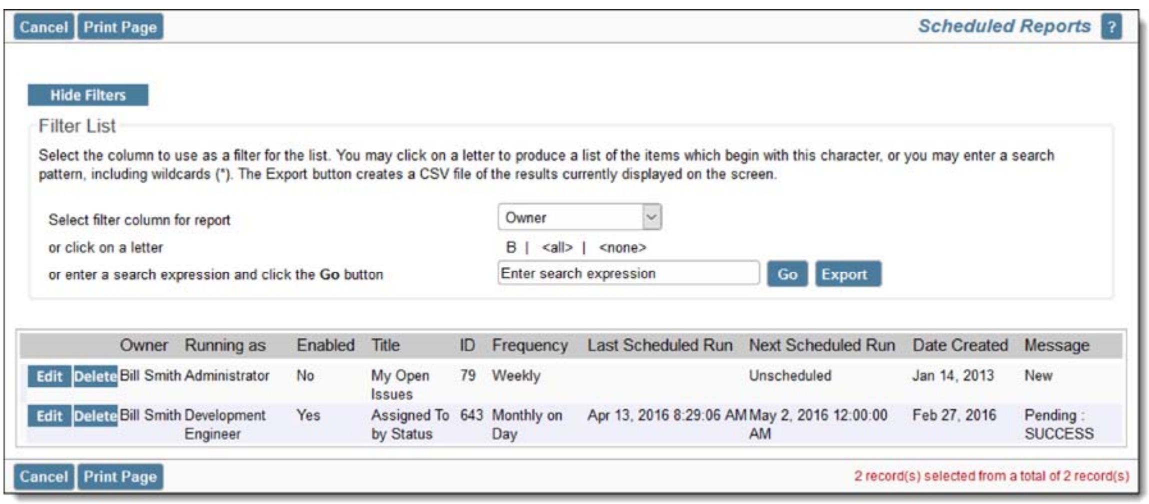
You will usually want to create an accompanying email with the scheduled report. The default **Subject Line** for the email delivery is the title to the report, but you can change this. Use the **Email Body** editor to compose the email that you want to send. Note that if you want to embed an image or logo within the body of the email, that the image must exist on a server that both you and the recipients of the report can access. If any of the recipients are going to be outside the firewall of your company's network, then you should use an absolute path to the image. For example, if you plan to add a company logo as part of your signature to the body of the email, you might include this image with a URL such as *http://www.mywebsite.com/images/company_logo.png*.

The Run Now Feature

Note the button named **Run Now** in the menubar of the popup. When you click this button, the report is immediately sent to the scheduler task and executed. All recipients should receive their copy of the report with this action, within a few moments of clicking the button.

Managing Your Scheduled Reports

On the Query screen, click the button with the title **Manage Scheduled Reports**. This will display a list of all scheduled reports for which you are the owner. From this screen you can edit the schedule for any report that has an existing schedule.



Managing your scheduled reports

Note that in order to be able to alter the schedule, you must be the person who created the schedule. The exception to this is that the administrator may also modify the schedule for all scheduled reports.

Document Repository

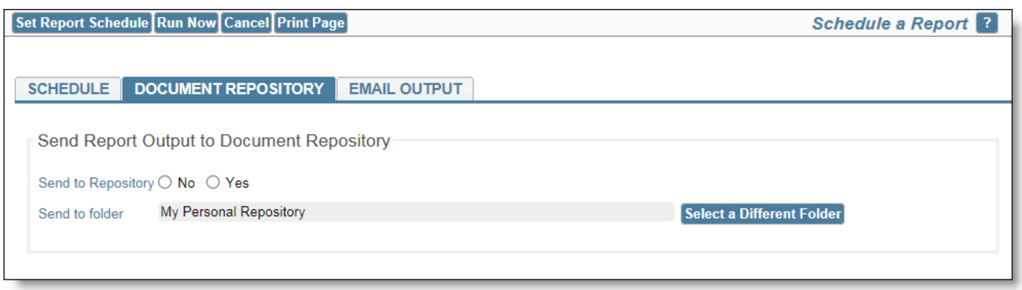
The document repository is accessed via the **Reports** screen. Users may send documents to the repository from the report scheduler, either on an immediate basis, or on a timed basis according to the schedule they create for the report. The user may store documents in a personal repository or within a public, shared repository. Permission from the administrator is required to write documents to the repository and separate permission is required to download documents from the repository.

Documents are saved in the repository by scheduling the report and setting the folder within the repository into which you want the document to be saved. You may create an automated naming convention to store your documents, for example indicating the year and month within which the report was created.

Reports sent to the repository are termed documents. These are viewed from the **Reports** screen, following the list of reports that a user may run. The repository documents may be stored in folders and sub-folders. Similar to reports, these can be personal in nature, stored in the **My Documents** section, or public, stored within the **Public Documents** section.

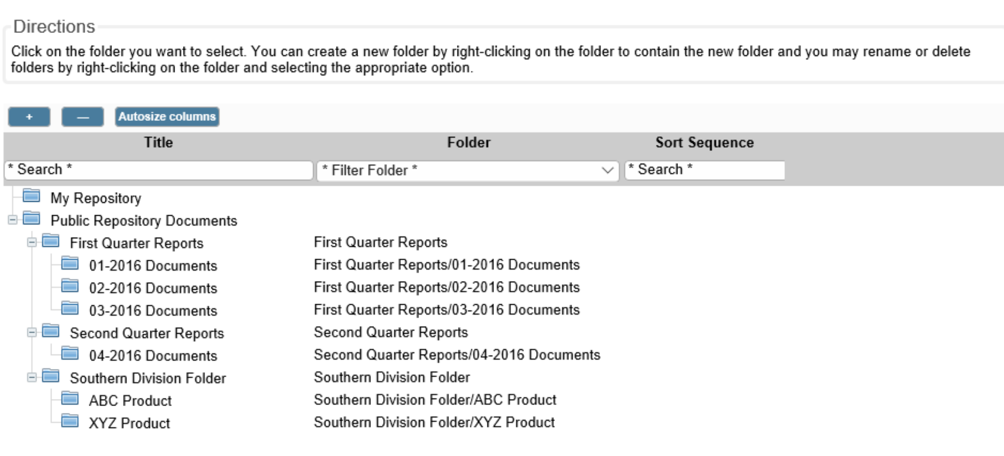
Sending Documents to the Repository

From a report editor of a saved report that supports being scheduled, click on the **Schedule Report** button. Then click on the **Document Repository** tab.



Setting up the Report Scheduler to Send a Document to the Repository

From the **Document Repository** tab, you set up output to the repository with the button **Send to Repository**, and then you select the folder in the repository to which you want the document to be placed when the report scheduler runs.



Select a Document Folder for Repository Output

Within the popup where you select the folder, you can also create new folders and sub-folders. Simply right-click on the folder beneath which you wish to create a new folder, and a *New Folder* appears. Name this folder appropriately.

Virtual Folder Names

Within the document repository it is often useful to collect documents for similar purposes under the same folder. The user has no ability to alter the name of the folders as documents are being created for insertion into the repository, as the report scheduler creates the documents automatically.

For example, you might want to place all the documents generated for a specific month into the same folder, or you might want all the documents generated about a specific product placed in the same folder. To facilitate this requirement, you can create a folder with a virtual name. The ExtraView report scheduler will use the information within the virtual name to automatically create folders as necessary. For example, when a new month starts and the report scheduler creates a new document for insertion into the repository, a new folder will be created automatically.

The date-based tokens you can use to create a virtual folder are:

$$DAY$$	The numeric day of the current month
$$MONTH$$	The numeric month of the current year. Note that month names are not supported to ensure readability of the months by non-English language users and to ensure that the months will be kept in a reasonable sort order within the repository
$$YEAR$$	The current year as a 4-digit number

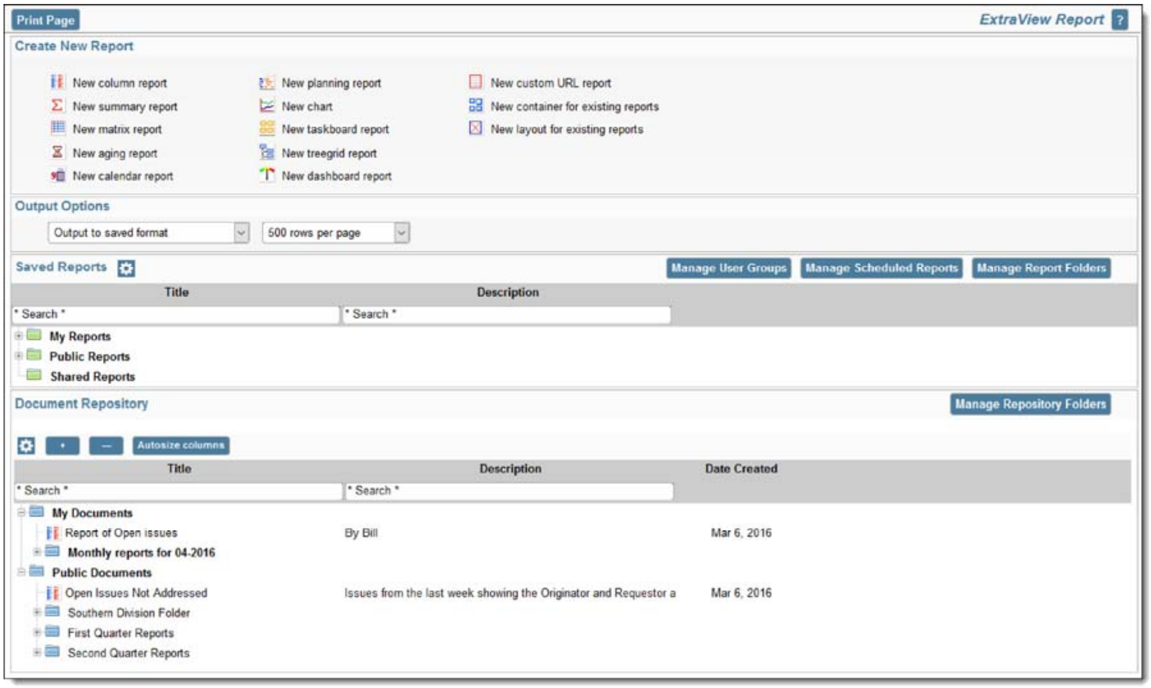
The tokens can be interspersed with normal text. For example, a virtual folder name of **Monthly reports for $$MONTH$$-$$YEAR$$** will be actualized as **Monthly reports for 02-2016** when the current month is February 2016.

Sending Documents to the Repository Without a Schedule

There are occasions when you might want to send a report output to the document repository without setting up a schedule for the report. To achieve this, from the report editor, click on the **Schedule Report** button, click on the **Document Repository** tab, set the folder as necessary and choose to send the report to the repository, then click on the **Run Now** button.

Accessing Documents in the Repository

From the **Reports** screen, click on the **View Documents** button within the **Document Repository** section of the screen.



The Document Repository on the Reports Screen

You may view or download any document by simply clicking on its title. If you have permission, you may use the right-click mouse button to delete the document. If you click on the gear wheel in the controls for the repository, you will see additional columns as follows:

Extended Repository Options

From this view, you can click on multiple documents, and delete them. Use the Select checkbox to identify the documents you want to delete. In addition you see additional information about the documents stored.

Report Folders

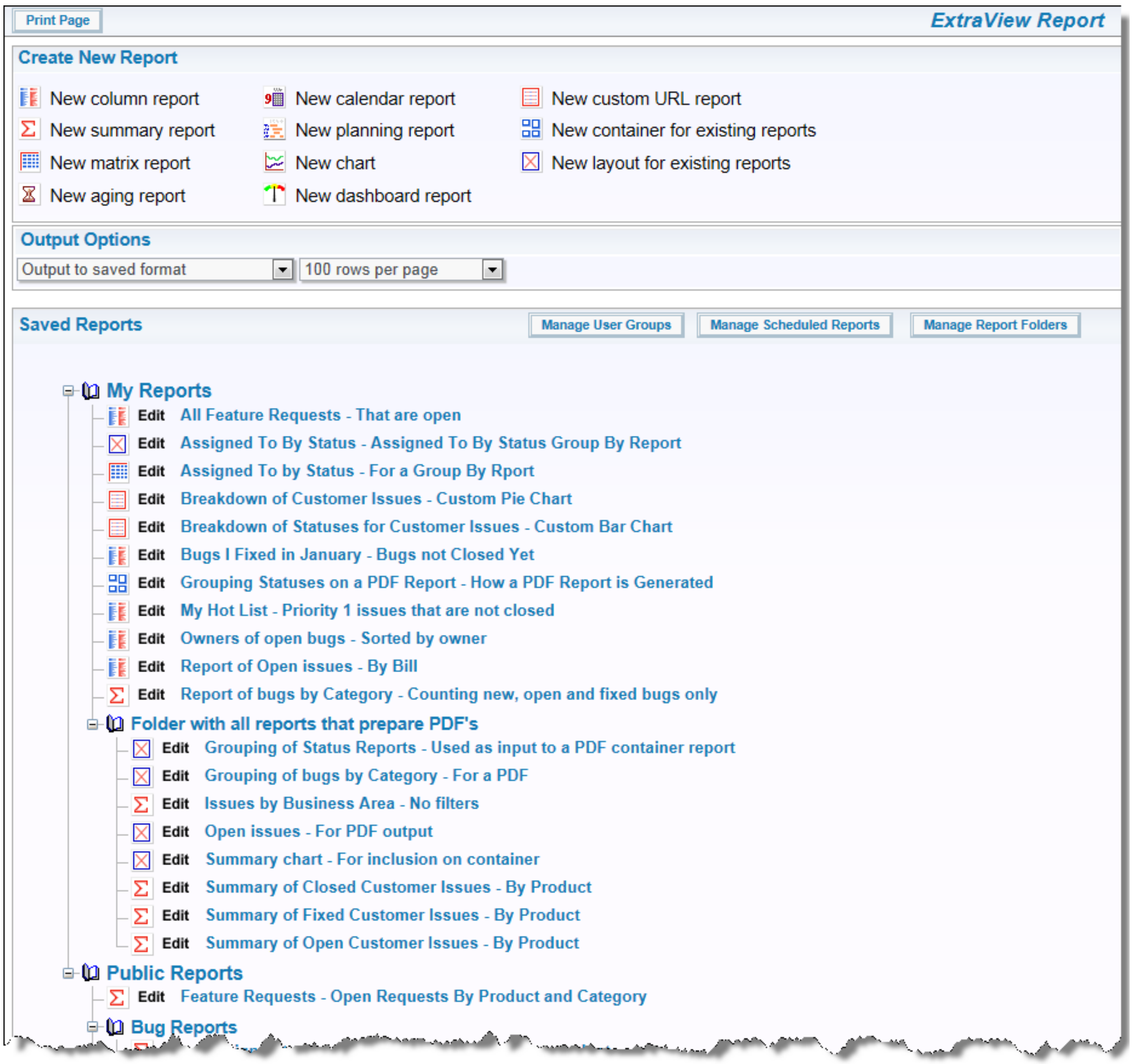
Reports are stored in report folders. Folders may contain other folders in a hierarchy.

The top level folders are fixed and contain Personal Reports and Public Reports. Personal Reports are reports that you create and manage yourself. With permission from the admnistrator, you can share a report within your Personal folders.

With permission you can create Public reports which will be visible to all users. You can also create reports that can only be shared with users of a specific role. There is no need to share a Public report with specific users.

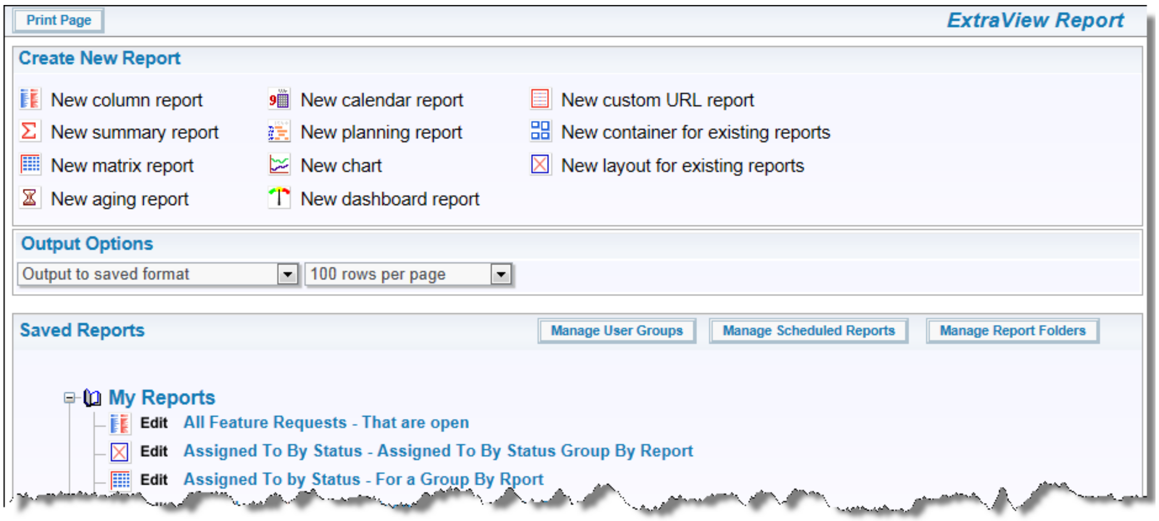
Note that when a report is shared with other users, whether it be a Public report, a report shared with users in role or a report shared with specific users, there is no guarantee that users who view the report will be able to see all the fields or all the issues within the report. There may be field-level security permission, or privacy of issues that prevent the visibility of such information.

Note that you can double-click on any report within the report folders, and providing you have permission, you can alter the report title or description, without needing to endter the report editor. You may also drag a report from one folder to another. However, you cannot drag a private report to a public report folder, or vice versa.



Report Folders

Creating New Reports & Output Options



Creating New Reports and Report Options

Click on a report type at the top of the screen to create a new report. This takes you to the report editor where you can compose a report before saving it.

You can use the remaining options as follows:

- **Output Options** - When you click on a report to run it, the output will appear in the report destination that you have saved within the report editor. The default output option is to use this saved format as the destination. However, you may override this by selecting a different report destination. Note that if the report destination is not the browser, you will see this by holding the mouse over the report title. The help tip will show its default destination. The available output formats are:
  - **Browser** - the report results will appear in a browser window, using HTML to render the results. This is the default for most report output. Calendar, Dashboard and Planning reports can only output to the browser
  - **Text**- this outputs the report to text, appearing within a browser window. You can save the text from your browser to a file for further use
  - **Microsoft Word** - this requires Microsoft Word to be installed on the user's computer and outputs the report directly into a Word document. Note that no images, buttons or links are output with this format
  - **Adobe PDF (Portrait)** - This requires the Adobe PDF Reader software to be installed on the user's computer. The report output will appear within an Adobe PDF window and in Portrait format. Container reports may only be output to Adobe PDF files
  - **Adobe PDF (Landscape)** - This requires the Adobe PDF Reader software to be installed on the user's computer. The report output will appear within an Adobe PDF window and in Landscape format. Container reports may only be output to Adobe PDF files
  - **Microsoft Excel (formatted output)** - This outputs the report with basic formatting to Microsoft Excel, which must be installed on the user's computer. Charts cannot be output directly to Microsoft Excel

    - **Microsoft Excel (plain output)** - This outputs the report with no formatting to Microsoft Excel, which must be installed on the user's computer. Charts cannot be output directly to Microsoft Excel
    - **Microsoft Excel (merge with uploaded file)** - This outputs the report to a Microsoft Excel spreadsheet. To prepare this output format, a spreadsheet is first uploaded into ExtraView, and ExtraView will send its data to a sheet within the file. Other sheets within the file may manipulate this data and perform any actions of which Excel is capable. Microsoft Excel must be installed on the user's computer. This output option is only available with Column reports
- **Rows per Page** - This allows you to set the rows per page for the report to use, when output to the browser. This value is remembered once it is set. Note that this option is only used with Column reports and queries that produce a Quicklist report.

Report Filters

Setting up report filters is identical to setting up query filters. Please see the section on Querying for details.

Runtime Filters

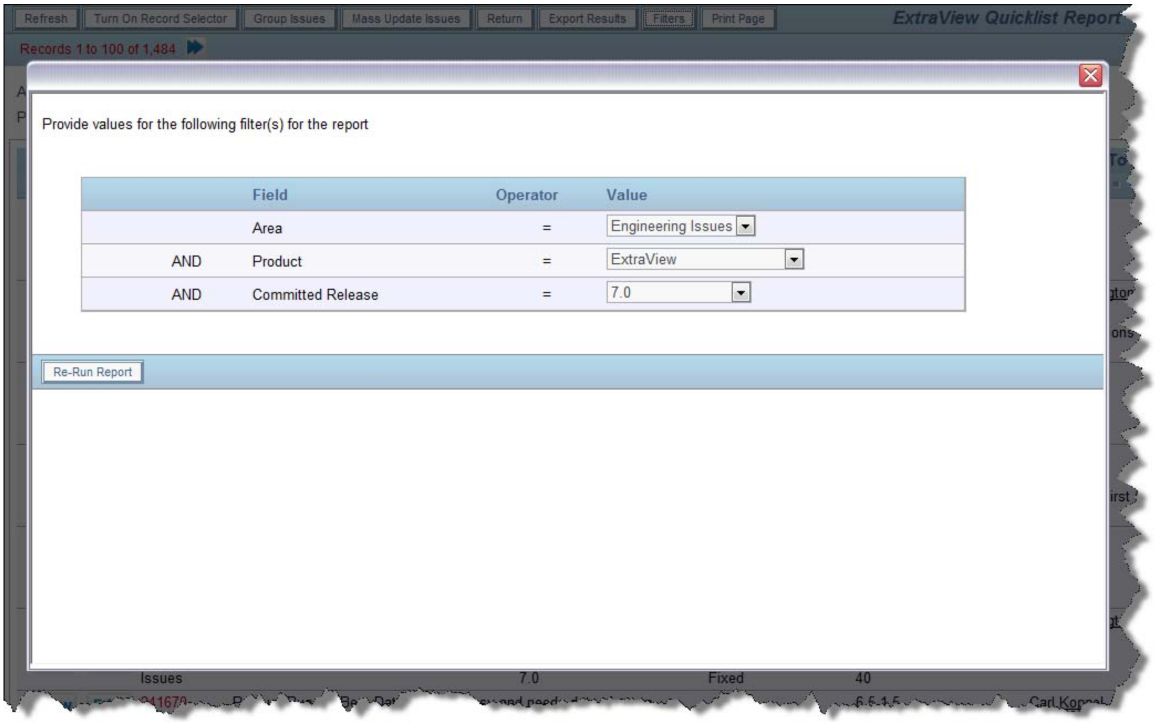
It is often desirable to create a report that can be used with different filters. For example, you may want to create a report which filters using different start and end dates, or you may want to create a report which when run will show the results for a different business area.

This can be accomplished using runtime filters. Within each filter list, you will see an entry * **Ask at runtime** *. If you select this entry, then when you run the report, you are asked for a value for this filter. If you do not choose one, the report is still produced, using the * **Any** * filter, i.e. all values are chosen as if there is no filter.

You can create a runtime filter for a text, date or other numeric type field, by entering **$$RUNTIME$$** in the field. This is saved with the report and you are asked at runtime for a value to use as a filter.

Note that if you intend to use runtime filters within a report container, then each report that is included in the report container must have the identical runtime filters defined. If you do not do this your runtime filters will be ignored for the execution of the container report and no error occurs.

Reports with runtime filters cannot be placed on a user's Home Page as a report. This is because it is undesirable to stop the preparation of a Home Page and ask a user to input values for filters.

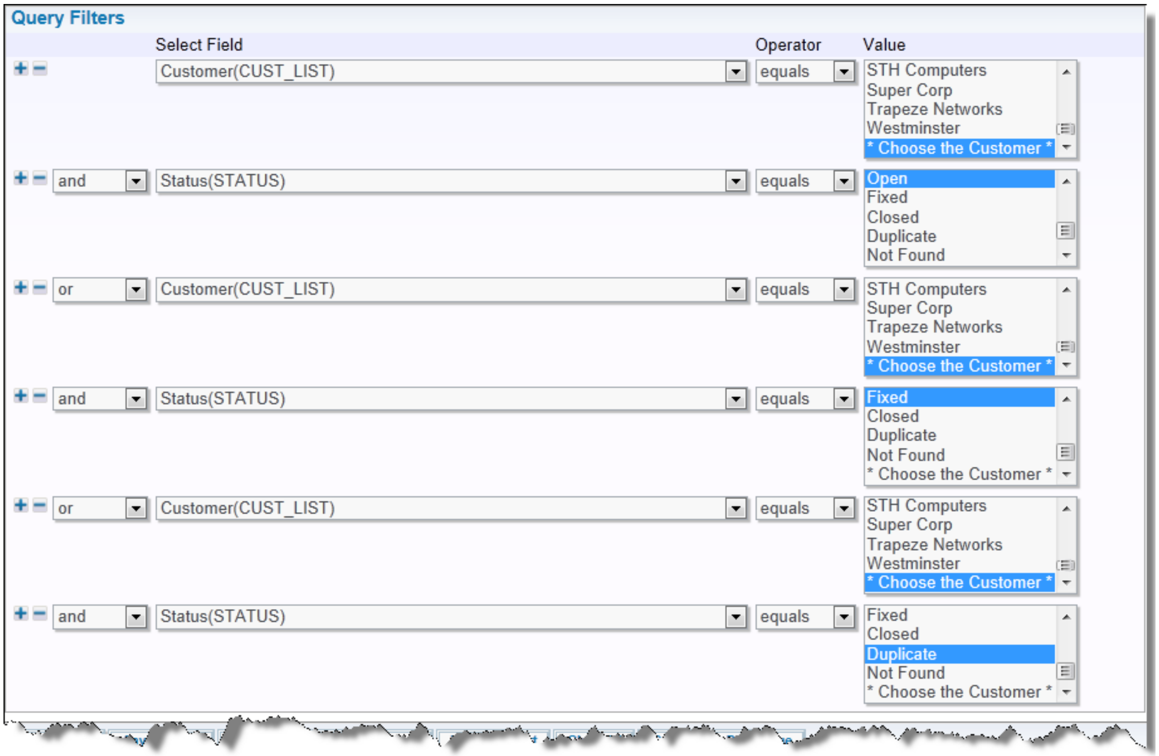


Runtime filters

There are occasions when you might want to run a report that has a complex set of filters, including the use of several **and** and **or** conjunctions. For example, you might want to pose the following query filters (this is not a real query, but it is useful as an example):

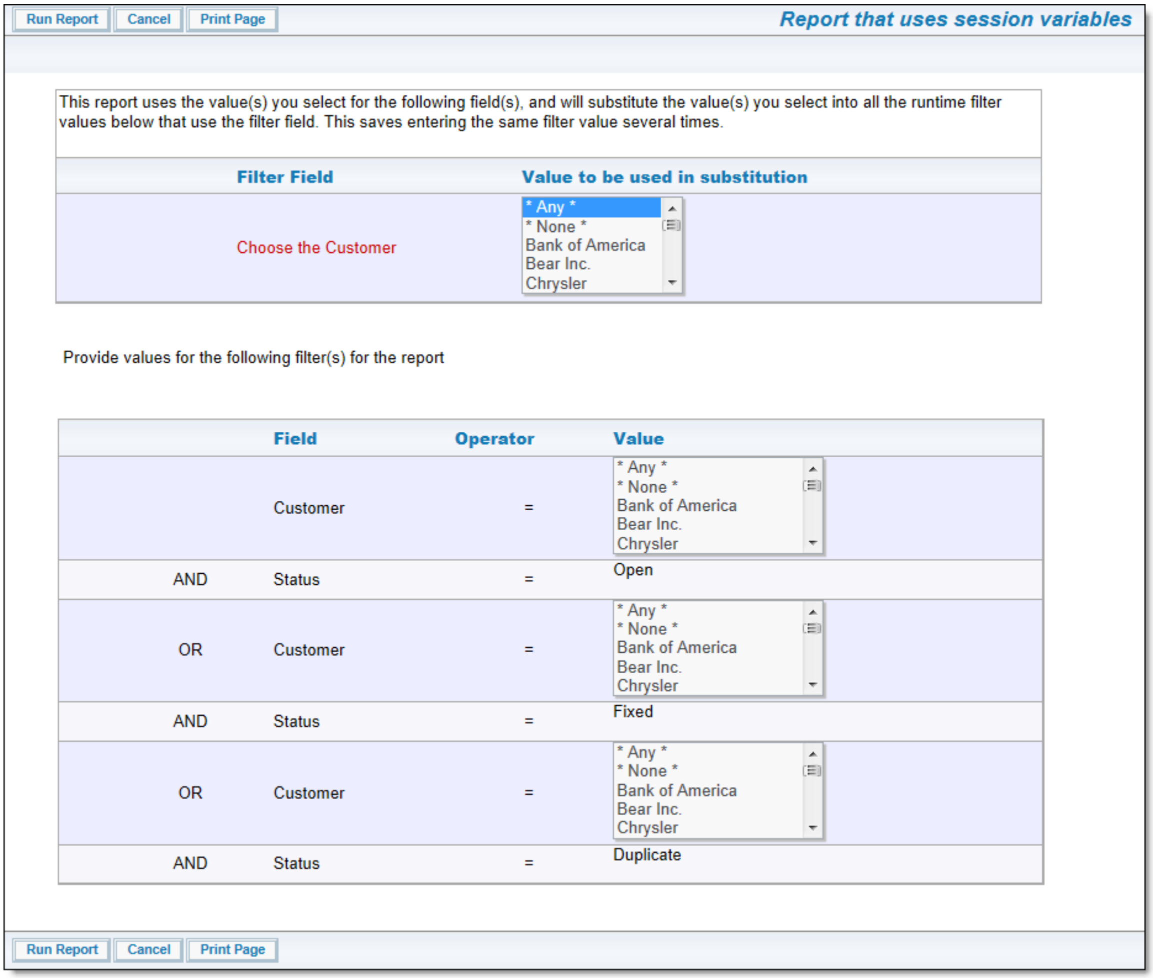
(Customer = *** Ask at runtime *** AND Status = **Open**)
OR (Customer = *** Ask at runtime *** AND Status = **Fixed**)
OR (Customer = *** Ask at runtime *** AND Status = **Duplicate**)

This would be represented in the report editor like this:



Setting up a complex query with runtime filters

When the report is run, the user will see the following screen:

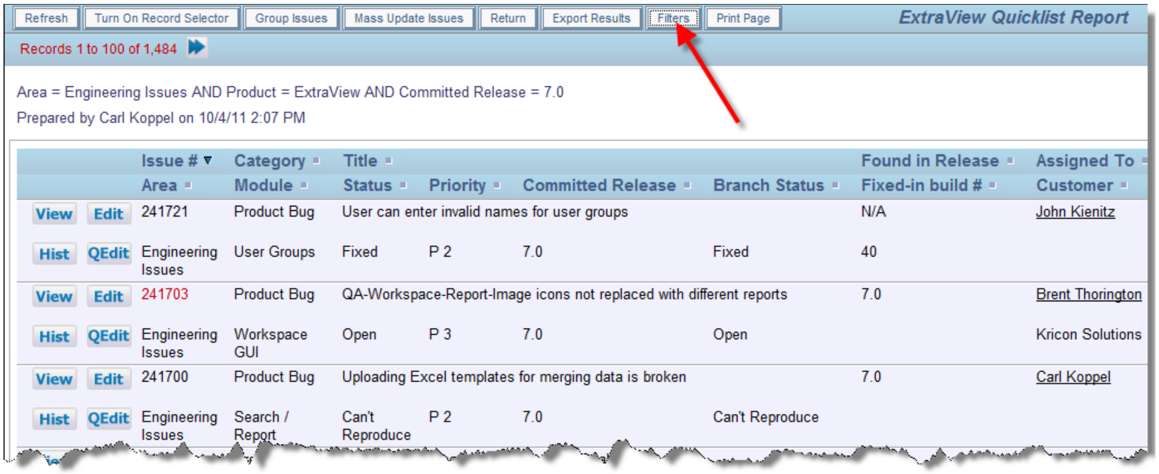


Running a complex query with runtime filters

When the user selects a customer from the top list, all the bottom filters that require a Customer will be set to use the value set from the top list. To accomplish this type of query with complex runtime filters, your administrator will have set up some special fields to use as runtime filters that can propogate their value to all filters.

Changing Filters after Running a Report

Once you have your report results, it is sometimes useful to be able to alter the value of the filters you selected, and view the new results. To achieve this, there is a button with the title **Filters** on the menubar. When you select this, a window pops up and allows you to reset the values of any of the filters, then immediately re-run the report.

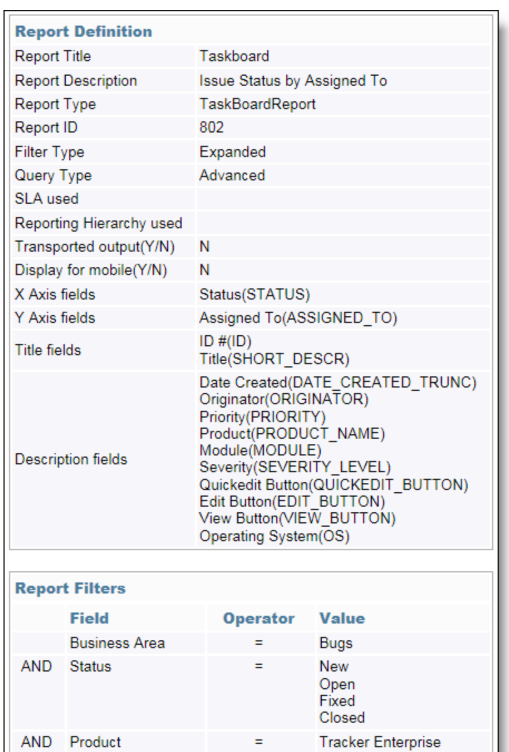


Altering filters after you have run a report

Note that if you set the value of any filter to * **Any** *, then you cannot reuse the **Filters** button a subsequent time on the same filter. When set to * **Any** *, the filter is removed from the list.

Report Definitions

All report editors have a checkbox option titled **Output Report Definition**. When this is selected, the report is displayed in the normal way. However, for Browser, Microsoft Word, and Adobe PDF output, the report is followed by two sections, the first displaying all the options selected for the report output, such as the title, columns being displayed and the sort order. The second section shows the filters used to create the report.



Report Definition

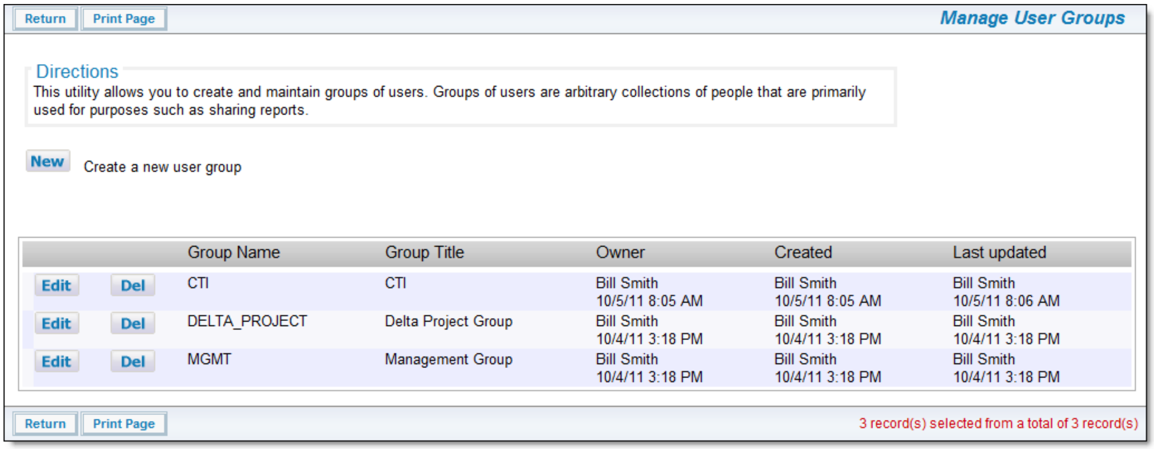
Report Title	Taskboard
Report Description	Issue Status by Assigned To
Report Type	TaskBoardReport
Report ID	802
Filter Type	Expanded
Query Type	Advanced
SLA used	
Reporting Hierarchy used	
Transported output(Y/N)	N
Display for mobile(Y/N)	N
X Axis fields	Status(STATUS)
Y Axis fields	Assigned To(ASSIGNED_TO)
Title fields	ID #(ID) Title(SHORT_DESCR)
Description fields	Date Created(DATE_CREATED_TRUNC) Originator(ORIGINATOR) Priority(PRIORITY) Product(PRODUCT_NAME) Module(MODULE) Severity(SEVERITY_LEVEL) Quickedit Button(QUICKEDIT_BUTTON) Edit Button(EDIT_BUTTON) View Button(VIEW_BUTTON) Operating System(OS)

Report Filters

	Field	Operator	Value
	Business Area	=	Bugs
AND	Status	=	New Open Fixed Closed
AND	Product	=	Tracker Enterprise

User Groups

User groups provide the ability to create an arbitrary list of users with whom you wish to share a report. If this feature has been enabled by your administrator, you will see the button **Manage User Groups** on the **Reports** screen. When you enter the feature, you will see a screen similar to this:



Manage User Groups

With permission, you can create a new ad hoc group of users, and maintain the list of users within the groups.

Reporting on Hierarchies

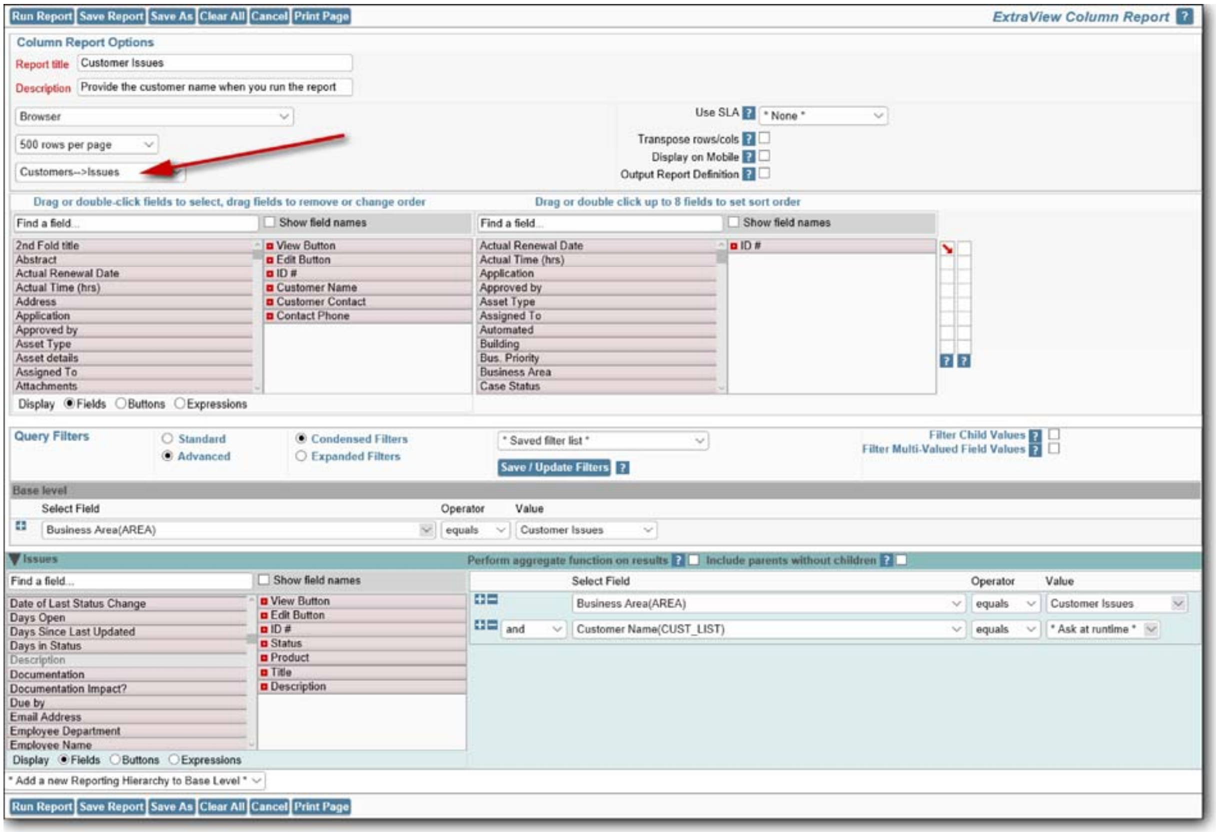
Note: This feature is not available to installations that use the Apache Derby database. There are limitations within the implementation of the database that preclude this feature from working.

This feature works with Column Reports, Summary Reports, Matrix Reports, Planning Reports and Calendar Reports.

Your administrator may have defined hierarchies for reporting. These allow you to select records at a parent level, and at up to seven child levels for reporting. You may choose to view different fields on a column report for each of the different hierarchy levels, and you may apply different filters to each of the hierarchy levels. In addition, there are functions available that allow you to aggregate the count of the number of issues at each level in the hierarchy.

Note: You must be in the **Advanced Query Screen** mode to create reports that use reporting hierarchies.

An example of a hierarchy report is that you may want to show a list of all issues by customer, showing details from the *Customer* business area for each customer, while showing details from the *Customer Issues* business area for each issue. The following screen shows how this may be set up.



Creating a hierarchical report

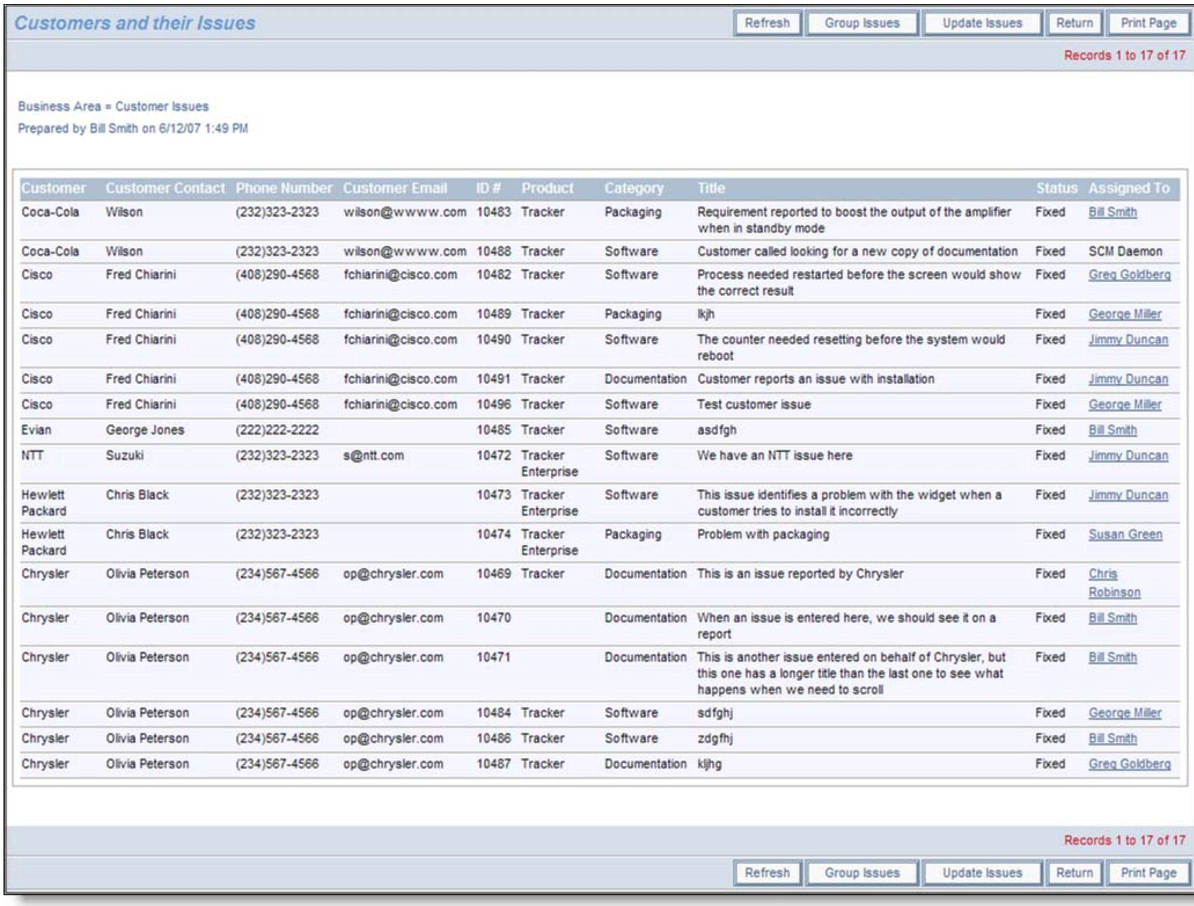
First, make certain you are in **Advanced Query Mode**. Next, you select the hierarchy from the available list of hierarchies within the options section of the report design screen. When you do select the hierarchy, the screen refreshes and you will see a field selection list for each level of the hierarchy, as well as a set of filters to be used for each level of the hierarchy.

The report output will show all the fields selected at all levels of the hierarchy, in the order they appear over all the selection lists.

For each level of the hierarchy, you can apply any filters required for that level in the hierarchy.

Note the checkbox option in the report editor that appears at each level of the hierarchical filters, with the label **Include parents without children**. If you select this option, parent records will appear on the output, whether or not there are any child records to display. These parent records are suppressed if you do not choose this option.

After following these instructions, you may see a report similar to the next screenshot.



Customers and their Issues

Refresh | Group Issues | Update Issues | Return | Print Page

Records 1 to 17 of 17

Business Area = Customer Issues
Prepared by Bill Smith on 6/12/07 1:49 PM

Customer	Customer Contact	Phone Number	Customer Email	ID #	Product	Category	Title	Status	Assigned To
Coca-Cola	Wilson	(232)323-2323	wilson@wwww.com	10483	Tracker	Packaging	Requirement reported to boost the output of the amplifier when in standby mode	Fixed	Bill Smith
Coca-Cola	Wilson	(232)323-2323	wilson@wwww.com	10488	Tracker	Software	Customer called looking for a new copy of documentation	Fixed	SCM Daemon
Cisco	Fred Chiarini	(408)290-4568	fchiarini@cisco.com	10482	Tracker	Software	Process needed restarted before the screen would show the correct result	Fixed	Greg Goldberg
Cisco	Fred Chiarini	(408)290-4568	fchiarini@cisco.com	10489	Tracker	Packaging	lkjh	Fixed	George Miller
Cisco	Fred Chiarini	(408)290-4568	fchiarini@cisco.com	10490	Tracker	Software	The counter needed resetting before the system would reboot	Fixed	Jimmy Duncan
Cisco	Fred Chiarini	(408)290-4568	fchiarini@cisco.com	10491	Tracker	Documentation	Customer reports an issue with installation	Fixed	Jimmy Duncan
Cisco	Fred Chiarini	(408)290-4568	fchiarini@cisco.com	10496	Tracker	Software	Test customer issue	Fixed	George Miller
Evian	George Jones	(222)222-2222		10485	Tracker	Software	asdfgh	Fixed	Bill Smith
NTT	Suzuki	(232)323-2323	s@ntt.com	10472	Tracker Enterprise	Software	We have an NTT issue here	Fixed	Jimmy Duncan
Hewlett Packard	Chris Black	(232)323-2323		10473	Tracker Enterprise	Software	This issue identifies a problem with the widget when a customer tries to install it incorrectly	Fixed	Jimmy Duncan
Hewlett Packard	Chris Black	(232)323-2323		10474	Tracker Enterprise	Packaging	Problem with packaging	Fixed	Susan Green
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	10469	Tracker	Documentation	This is an issue reported by Chrysler	Fixed	Chris Robinson
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	10470		Documentation	When an issue is entered here, we should see it on a report	Fixed	Bill Smith
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	10471		Documentation	This is another issue entered on behalf of Chrysler, but this one has a longer title than the last one to see what happens when we need to scroll	Fixed	Bill Smith
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	10484	Tracker	Software	sdfghj	Fixed	George Miller
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	10486	Tracker	Software	zdgfhj	Fixed	Bill Smith
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	10487	Tracker	Documentation	kljhg	Fixed	Greg Goldberg

Records 1 to 17 of 17

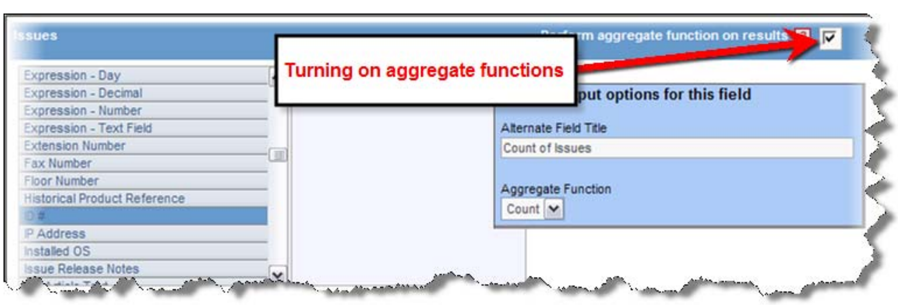
Refresh | Group Issues | Update Issues | Return | Print Page

Sample output of Hierarchical Report

Column reports support a special type of hierarchical reporting, called side-by-side hierarchies. Reporting hierarchies are defined with a chain of descending levels, such in ways such as parent, child, and grandchild levels. With side-by-side hierarchies, the user can select multiple, independent hierarchies, all with the same base (top) level, and place the results side-by-side on the report output. For more information, click <u>here</u>.

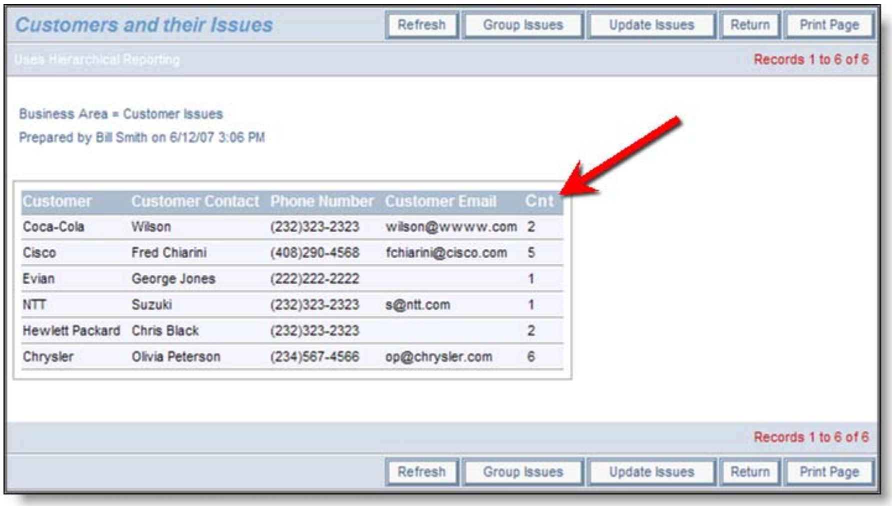
Aggregation

In the report editor, you can turn on aggregate counting functions for child levels within a hierarchical report. For example, you may want a count of *Fixed* issues for each customer. This implies that you need to display each customer from the Customers business area and then count the *Fixed* issues.



Aggregate functions

This may be achieved by a variant of the above report. First, you check the box against the prompt **Perform aggregate functions on results**. The list of fields at the child level of the query (in this case the *Issues* level) will clear. Select a field and you may then use your right-hand mouse button to access the output options for the field. In our example, we can *count* the ID's with an additional filter of **Status** = *Fixed* to achieve the results we would like to see. This selection process may result in a report something like:



Customer	Customer Contact	Phone Number	Customer Email	Cnt
Coca-Cola	Wilson	(232)323-2323	wilson@wwww.com	2
Cisco	Fred Chiarini	(408)290-4568	fchiarini@cisco.com	5
Evian	George Jones	(222)222-2222		1
NTT	Suzuki	(232)323-2323	s@ntt.com	1
Hewlett Packard	Chris Black	(232)323-2323		2
Chrysler	Olivia Peterson	(234)567-4566	op@chrysler.com	6

Aggregate report showing count of Fixed issues

The complete list of aggregate functions you can use is:

Function	Purpose
Count	This will count the number of child records within each parent record that match the selection filters
Sum	This will sum the total of the numeric value of the child records within each parent record that match the selection filters
Min	This will show the minimum numeric value of the child records within each parent record that match the selection filters
Max	This will show the maximum numeric value of the child records within each parent record that match the selection filters
Mean	This will show the mean of the numeric values of the child records within each parent record that match the selection filters

Personal & Public Reports

Personal Reports

These are reports or charts that you have prepared and saved for your personal use. Other users may not access these.

Public Reports

These are reports or charts that you or someone else has prepared for use across individual user roles or for everyone’s use. Your administrator must give you permission to create and save public reports.

Role-Based Reports

These are reports or chanrts that may be shared across all the users of a user role. Your administrator must give you permission to create and save public reports.

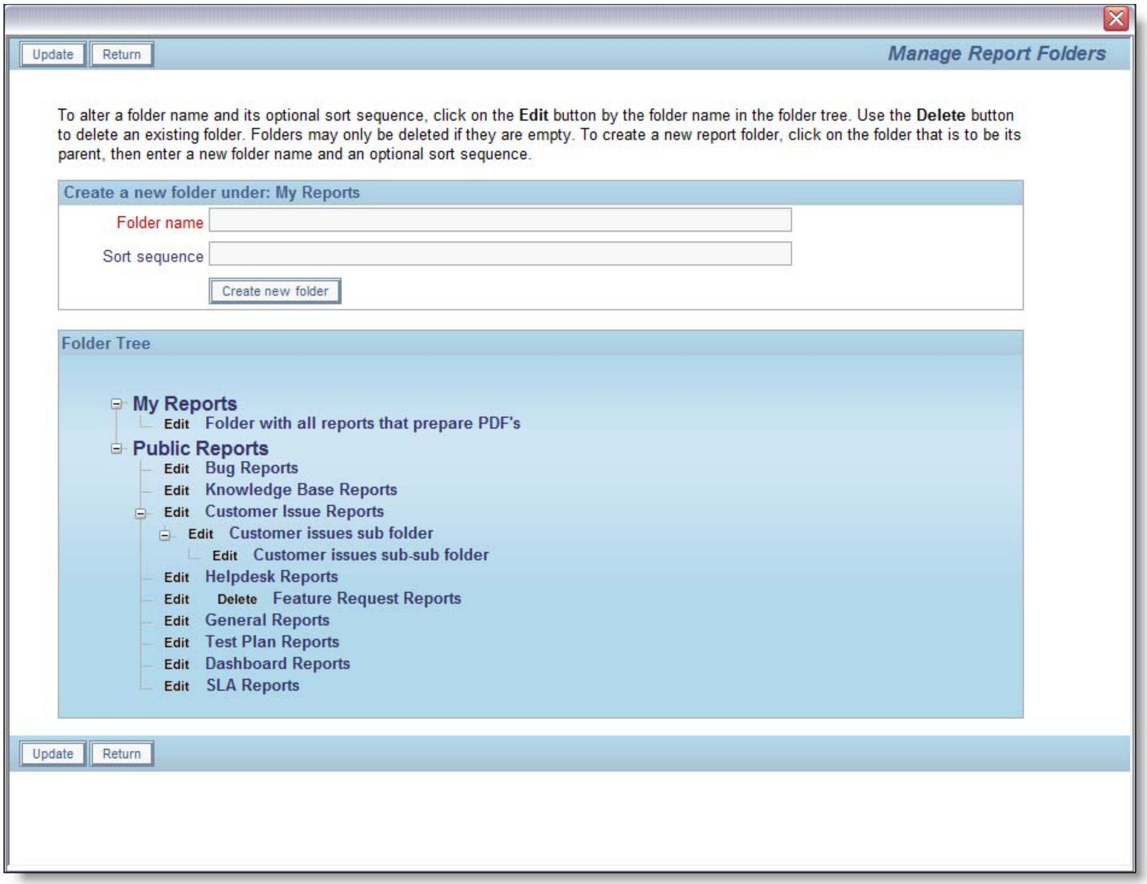
Shared Reports

These are reports or charts that you may share arbitrarily, with any users that you nominate. With permission, you can create and maintain groups of users that you may share reports with.

Report Organization

Reports are organized within the Personal Reports and the Public Reports folders that you see on the Query screen. Within both the Personal Reports and the Public Reports sections, you can create sub-folders to keep reports of a similar nature organizaed. Sub-folders may contain other sub-folders.

You can manage the folders by clicking on the **Manage Report Folders** button. If you do not have any folders to manage, then this button will not appear. This displays a screen similar to the following:



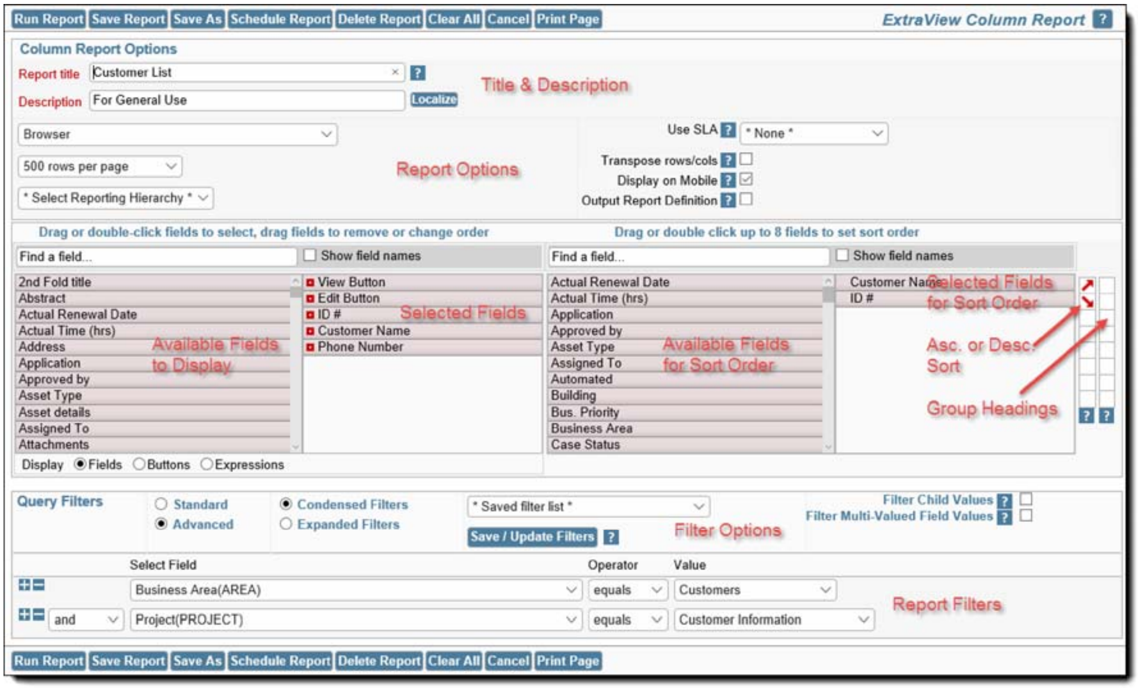
Folders can be created at any point in the tree by clicking on the place in the tree where you want to create the new folder, then entering a new folder name, followed by clicking on the **Update** button. The **Edit** button allows you to rename any report folder. Note that the **Delete** button only appears by a report folder that does not contain any reports. If you want to delete a report folder that contains reports, you must either move the reports to a different location, or delete them first.

Report Types

There are several actions that can be taken from the Report screen to create and maintain different types of reports. You select the action for the report type from the select list and press the **Go** button.

Column Reports

With Column reports, you select which columns to display, and which filters to set. The resultant report can be sorted by any of the fields displayed, with a single mouse click. Column reports can be saved as personal or public reports. You are able to select from any fields to which you have read permission. To prepare a new Column report, choose the **Create New Column Report** option. The screen presented to you will be similar to the following:



Creating a column report

Selecting columns to display and the sort order

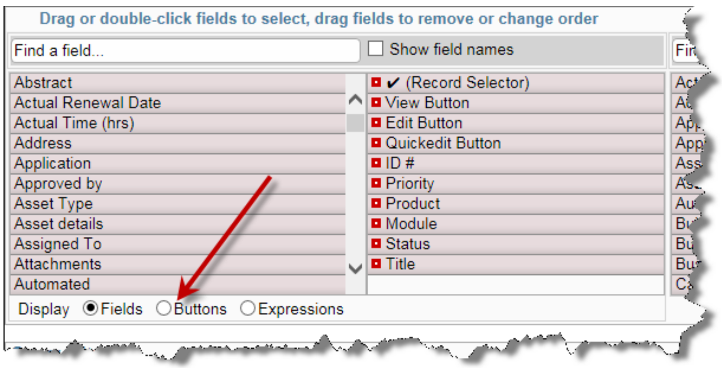
- Select the columns that you require on your report, by dragging the field to the selected field list or double-clicking on each field name; the selected fields will be moved to the right-hand box. If you want to alter the order of the fields being displayed on the report, you can click on a field in the right-hand box and drag it to a new position. To remove a field from the report, drag it out of the box
- Use the area with **Find a Field ...** to search within the field list. Type any characters within the field title you are looking for. As you type, the list of field titles shortens to allow you to home in on the one you are looking for. If you click the **Show Field Names** checkbox, you will see all the field names as well as the field titles in the list
- By default, the columns that can first be selected are all the fields to which you have permission. If you want to place a button on your report, click on the **Buttons** radio button.

  The possible buttons that can be placed on a column report are:

Delete Button	This allows the deletion of the issue
Edit Button	This button allows you to edit the issue
History Button	Clicking this button displays the history of the issue
Quickedit Button	This allows you to use Quickedit mode within the report
View Button	Displays the Detailed Report for the issue
✓ (Record Selector)	Places the record selector button on the menubar of the report. When you click this, a checkbox appears beside each issue which is used to select the issue for further processing, such as a mass update

operation, to group the issues together, or to drag the issue within a workspace

If you want to select from available calculated fields (expressions), click on the **Expressions** button:



- Similarly, choose the columns on which you wish to sort the report. You may select up to four columns on which to sort the report in either an ascending or a descending order. The default of ascending order is first selected when you choose a column. If you do not choose any sort order, ExtraView will use the issue number as the sort order in descending order (i.e. the most recently added issues will appear first)
- If you click on the title of the browser output to a column report, the report is resorted, using the field you selected in an ascending order. Clicking on the title a second time will resort the report again, this time using the field in a descending order. If you sort on a field, then choose a different field to sort the report on, the first field is still used in the sort order, but secondary to the field you just clicked on.

Column width on the report output

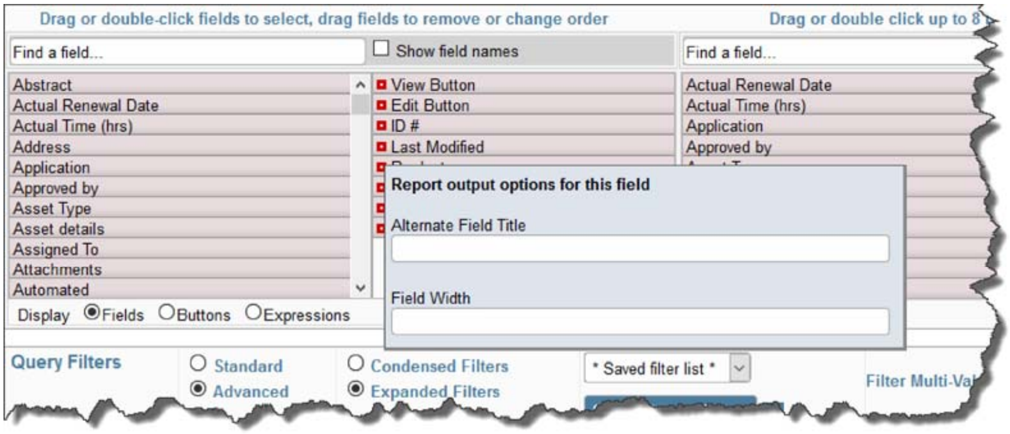
By default, the width of columns on browser output are not set, and the user's browser determines the width of each column using its own algorithms. Most of the time, this works well, but there are times when you might want to accurately fix the width of the columns being displayed on the output. Right-click on the red button by the field name you selected for the report, and one of the fields allows you to fix the width of the column, measured in characters. Microsoft Word and PDF column width output are set using the same option.

Transposing the rows and columns on the output

You may use the option **Transpose rows/cols** to alter the report output such that the rows on the report display become columns and vice versa. There is a limit to the number of resulting records that can be displayed in this way. This limit is much higher that you will be able to see on a display without scrolling a huge amount in a horizontal direction and is much higher than you could ever print on a sheet of paper.

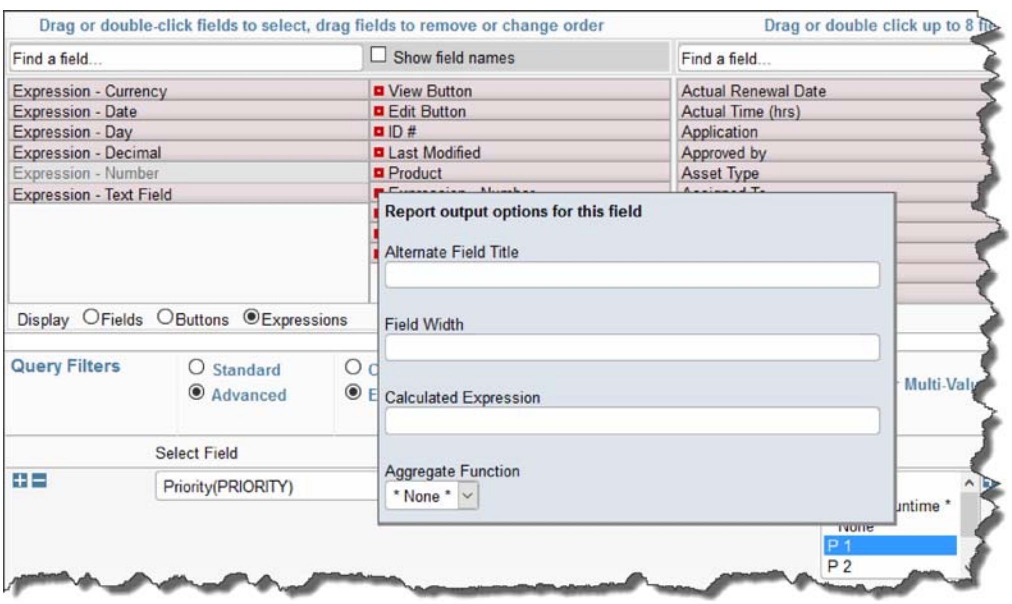
Selected column options

Once a column has been selected to display on a report, a small button appears to the left of the field title. This allows you to set options or attributes, according to the type of field. To view or change the attributes, place your mouse cursor over the button, and click the right-hand mouse button. A window pops up, giving access to the available attributes.

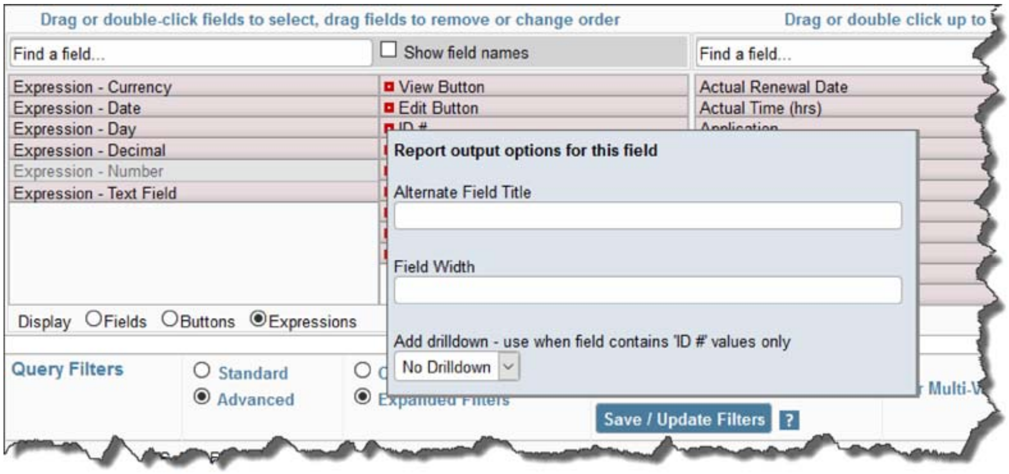


Selecting options for the Category column

In the example shown below, the user right-clicked on an expression type field, where they can enter an alternative title for the field to be displayed on this report's output, a width for the field and an expression and an aggregate function. Calculated expressions are more fully explained in the Administration guide.



Selecting options on a field that allows calculated expressions



Drilldown option for text fields

Text fields, such as the issue ID field have one additional option, which allows a link to drilldown into the issue to be placed on the field when it is output to a report. This drilldown may be to the *Detailed* report, using the **View** function, or to the *Edit* screen, using the **Edit** function.

Note: You should only place a drilldown on a field that contains an issue number, such as **Issue ID** or a field with a related issue number. It is likely that using a drilldown will generate an error if there is not a valid ID.

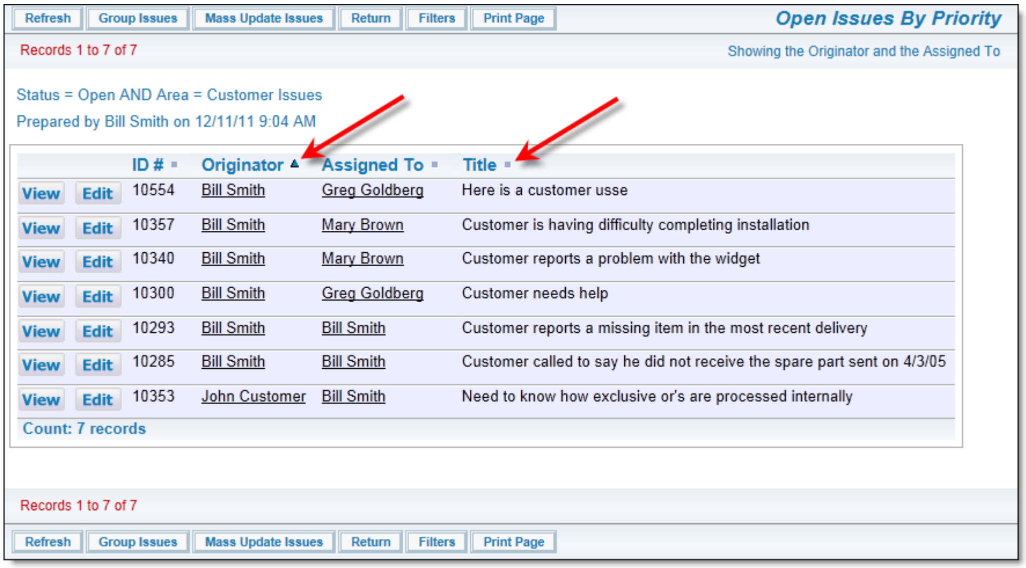
Field Display Type	Expression Results
Number, Currency, Decimal	The result will be numeric. For example, you may add or multiply different fields together: To calculate a field that shows the total of an amount plus 8% tax, use an expression similar to: $$AMOUNT$$ * 1.08
Date, Day	The result will be another date. For example, if you want to calculate a due date, one week after a given date, you may use an expression similar to: $$DUE_DATE$$ + 7
Text	This can be used to concatenate different text values together. For example, to produce a full name from a field named MYNAME plus a field named MYID, you may use an expression similar to: $$MYNAME$$ || ' ' || $$MYID$$ Note the use of the || to concatenate text strings together. This is because the underlying database uses this convention as opposed to using the more natural + to concatenate two text strings. Also, note the use of single quotes around text literals. This is a standard SQL database convention. Double-quotes do not work, and you will receive an error if you use these.

Totaling of Numeric Fields

If there are numeric fields on the report that you have prepared, and the administrator has enabled totaling on the field, then the numeric fields displayed will be totaled.

Sorting the Output

You can click on column titles to sort the report by the values in that column. Note that your administrator must have elected to allow sorting on each field, so not every column on a report may be sortable in this way. If it is sortable, a small grey icon appears to the right of the field. Click on the column title or icon to sort the output. One click sorts the column descending, and one more click sorts the column contents ascending.


Refresh | Group Issues | Mass Update Issues | Return | Filters | Print Page

Open Issues By Priority

Records 1 to 7 of 7

Showing the Originator and the Assigned To

Status = Open AND Area = Customer Issues

Prepared by Bill Smith on 12/11/11 9:04 AM

		ID #	Originator	Assigned To	Title
View	Edit	10554	Bill Smith	Greg Goldberg	Here is a customer usse
View	Edit	10357	Bill Smith	Mary Brown	Customer is having difficulty completing installation
View	Edit	10340	Bill Smith	Mary Brown	Customer reports a problem with the widget
View	Edit	10300	Bill Smith	Greg Goldberg	Customer needs help
View	Edit	10293	Bill Smith	Bill Smith	Customer reports a missing item in the most recent delivery
View	Edit	10285	Bill Smith	Bill Smith	Customer called to say he did not receive the spare part sent on 4/3/05
View	Edit	10353	John Customer	Bill Smith	Need to know how exclusive or's are processed internally

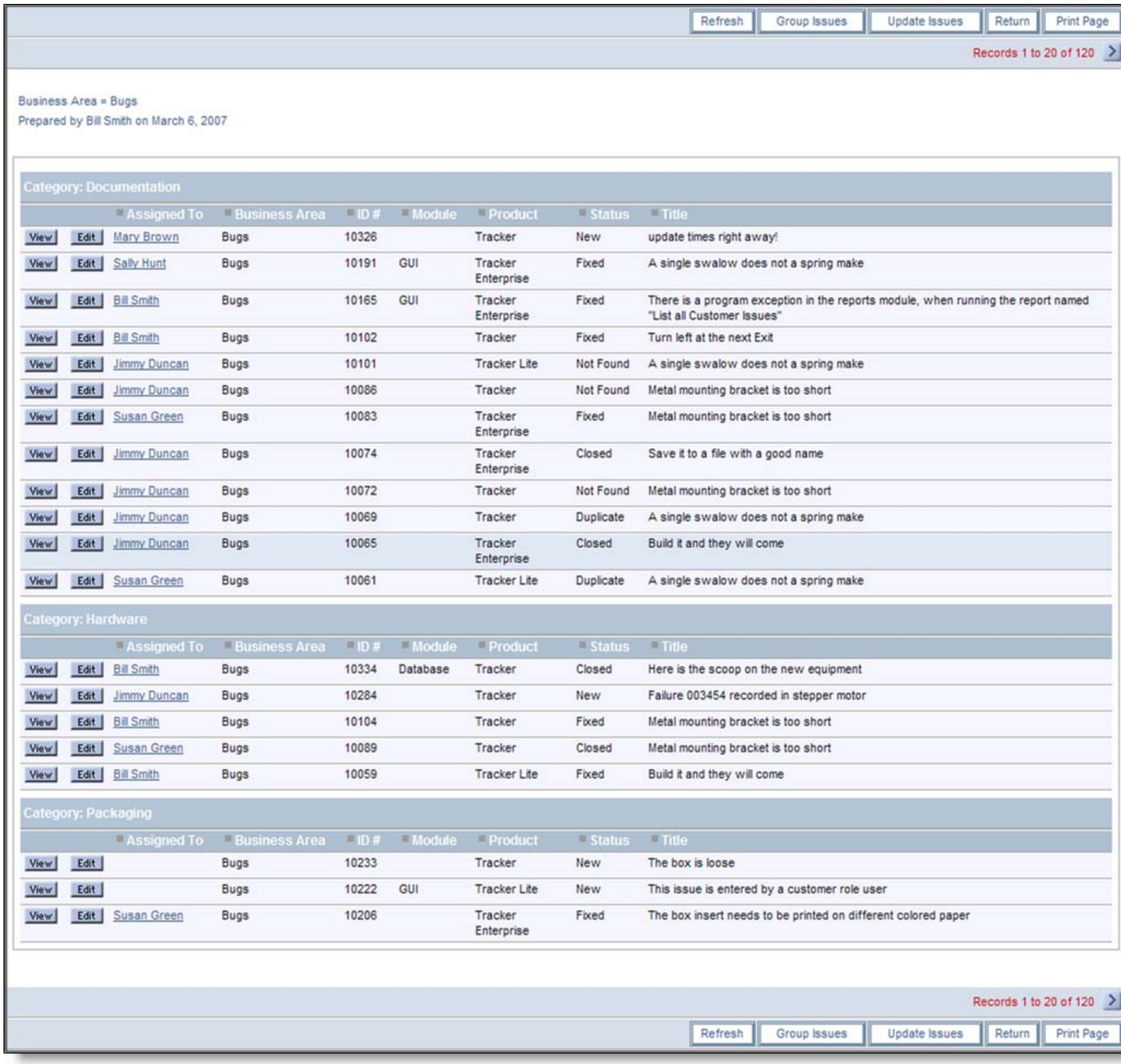
Count: 7 records

Records 1 to 7 of 7

Refresh | Group Issues | Mass Update Issues | Return | Filters | Print Page

Group Headings

If you click on the rightmost box by a field you have selected as a sort order, then the field is promoted to become a group heading on the output display. This is seen below, when the field Business Area and Assigned To fields were checked and were promoted to group headings. All four sort order fields that can be selected can be promoted to become group headings on a column report.


Refresh | Group Issues | Update Issues | Return | Print Page

Records 1 to 20 of 120

Business Area = Bugs
Prepared by Bill Smith on March 6, 2007

Category: Documentation

		Assigned To	Business Area	ID #	Module	Product	Status	Title
View	Edit	Mary Brown	Bugs	10326		Tracker	New	update times right away!
View	Edit	Sally Hunt	Bugs	10191	GUI	Tracker Enterprise	Fixed	A single swalow does not a spring make
View	Edit	Bill Smith	Bugs	10165	GUI	Tracker Enterprise	Fixed	There is a program exception in the reports module, when running the report named "List all Customer Issues"
View	Edit	Bill Smith	Bugs	10102		Tracker	Fixed	Turn left at the next Exit
View	Edit	Jimmy Duncan	Bugs	10101		Tracker Lite	Not Found	A single swalow does not a spring make
View	Edit	Jimmy Duncan	Bugs	10086		Tracker	Not Found	Metal mounting bracket is too short
View	Edit	Susan Green	Bugs	10083		Tracker Enterprise	Fixed	Metal mounting bracket is too short
View	Edit	Jimmy Duncan	Bugs	10074		Tracker Enterprise	Closed	Save it to a file with a good name
View	Edit	Jimmy Duncan	Bugs	10072		Tracker	Not Found	Metal mounting bracket is too short
View	Edit	Jimmy Duncan	Bugs	10069		Tracker	Duplicate	A single swalow does not a spring make
View	Edit	Jimmy Duncan	Bugs	10065		Tracker Enterprise	Closed	Build it and they will come
View	Edit	Susan Green	Bugs	10061		Tracker Lite	Duplicate	A single swalow does not a spring make

Category: Hardware

		Assigned To	Business Area	ID #	Module	Product	Status	Title
View	Edit	Bill Smith	Bugs	10334	Database	Tracker	Closed	Here is the scoop on the new equipment
View	Edit	Jimmy Duncan	Bugs	10284		Tracker	New	Failure 003454 recorded in stepper motor
View	Edit	Bill Smith	Bugs	10104		Tracker	Fixed	Metal mounting bracket is too short
View	Edit	Susan Green	Bugs	10089		Tracker	Closed	Metal mounting bracket is too short
View	Edit	Bill Smith	Bugs	10059		Tracker Lite	Fixed	Build it and they will come

Category: Packaging

		Assigned To	Business Area	ID #	Module	Product	Status	Title
View	Edit		Bugs	10233		Tracker	New	The box is loose
View	Edit		Bugs	10222	GUI	Tracker Lite	New	This issue is entered by a customer role user
View	Edit	Susan Green	Bugs	10206		Tracker Enterprise	Fixed	The box insert needs to be printed on different colored paper

Records 1 to 20 of 120

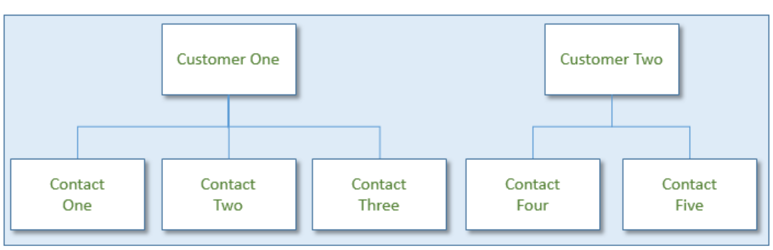
Refresh | Group Issues | Update Issues | Return | Print Page

Sample column report with group headings

Column Reports & Hierarchies

Column reports can work with hierarchies in two separate ways. These ways can also be combined together for output.

The first hierarchical report method uses a predefined hierarchy, as set up and named by your site administrator, and described on the page Reporting on Hierarchies. These hierarchies are typically of the parent-child variety, where one parent issue has some number of child records directly related to the parent issue. For example, a *Customer* issue may each have many *Contacts*. A report will display issues for this simple hierarchy in this fashion:

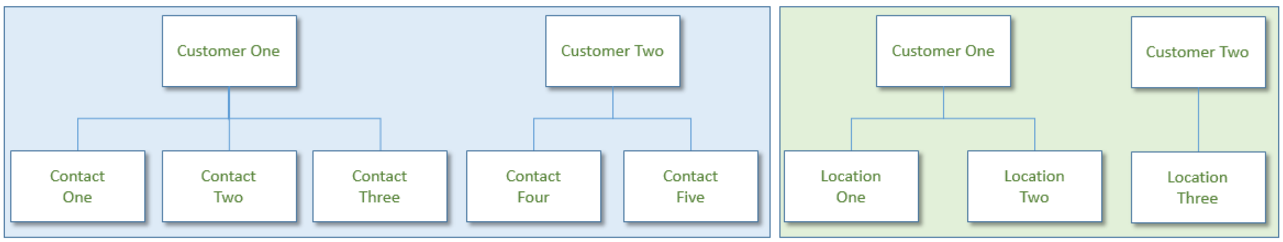


Logical Representation of Simple Parent-Child Hierarchy

Customers	Contacts
Customer One	Contact One
Customer One	Contact Two
Customer One	Contact Three
Customer Two	Contact Four
Customer Two	Contact Five

Report Output of Simple Parent-Child Hierarchy

The second method of hierarchical reports is to combine two or more hierarchies on a single report. This method relies on each hierarchy having the same parent field, but there are two (or more) separate child relationships. The different child records may not have anything in common with each other. These are termed side-by-side hierarchies on the report. Consider this set of relationships:



Logical Representation of Two Hierarchies with the Same Parent

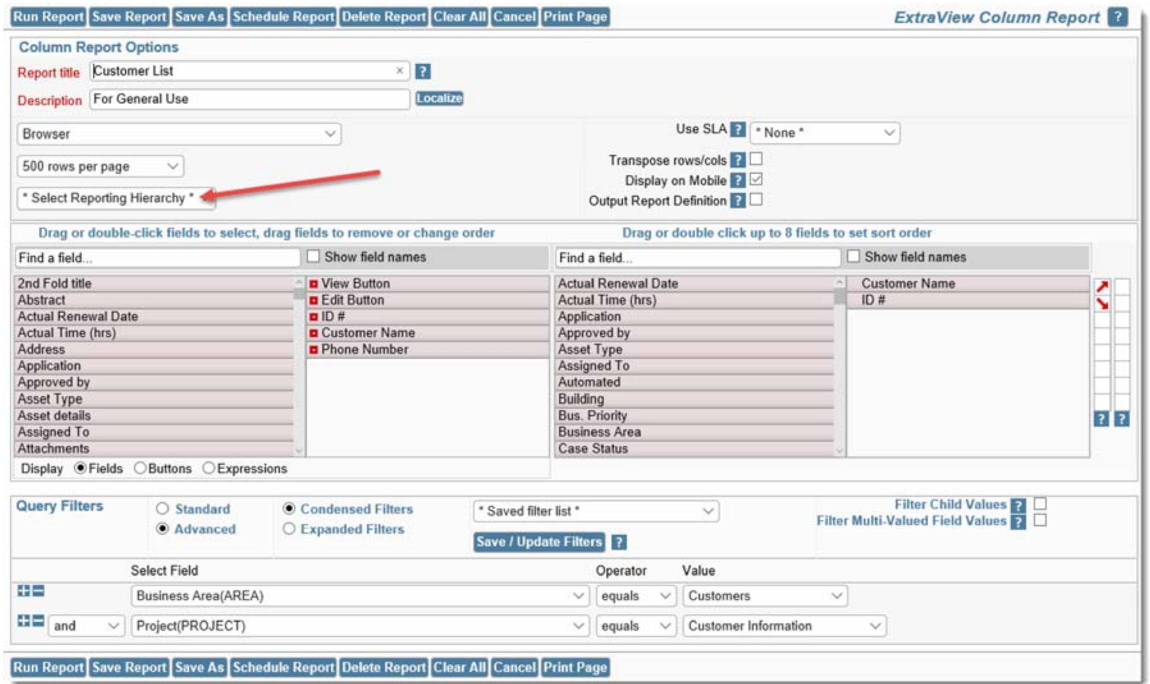
Customers	Contacts	Locations
Customer One	Contact One	Location One
Customer One	Contact Two	Location Two
Customer One	Contact Three	
Customer Two	Contact Four	Location Three
Customer Two	Contact Five	

Report Output of Two Hierarchies with a Common Parent

Note that there is no direct relationship between the *Contacts* and the *Locations*, even though they are displayed on the same row of the report output.

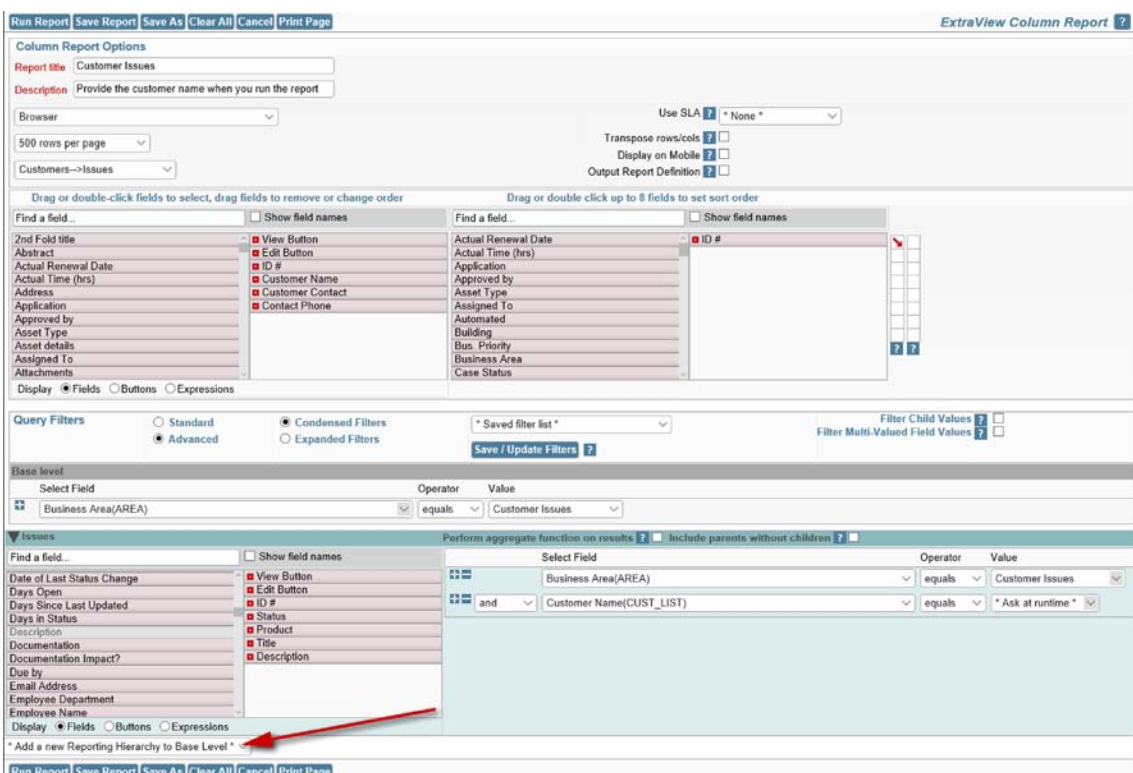
It is possible to present multiple side-by-side hierarchies on a single report, and each of these hierarchies may have multiple levels. In all cases, the records from each of the side-by-side hierarchies will be rendered beginning with the top row of its parent value.

To create a report with a hierarchy, choose the hierarchy you wish to use from the list, as shown below. This will add a new section to the report editor, allowing you to add the fields to be displayed for each level of the hierarchy, as well as a filter section where you can set the conditions for displaying the records at that level:



Selecting a Report Hierarchy

Once you have selected a report hierarchy, you select a side-by-side hierarchy with the additional select list that is displayed at the bottom of the first hierarchy:



Adding a side-by-side hierarchy

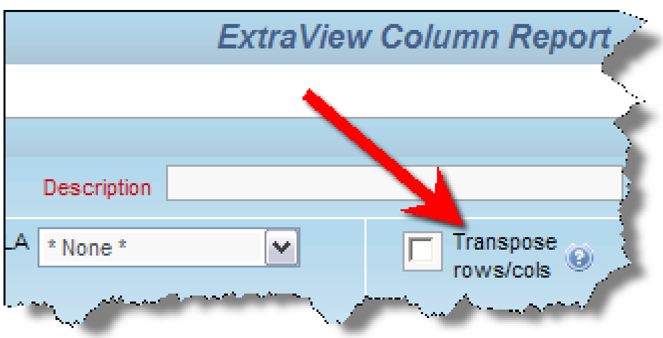
After adding a side-by-side hierarchy, a new set of fields and filters, with a different background color appear. The side-by-side hierarchy that you select should have the same parent field as the first report hierarchy you selected, else you will not obtain meaningful results.

Within the report result output, there is the usual count of records in the form **Displaying records 1 to nn records of yy**. Note that the **nn** refers to the number of records on the page, and **yy** refers to the total number of issues presented in the report. Given that the report involves one-to-many relationships, this number is likely to be greater than the number of rows on the report.

Transposing Rows/Columns

- Add new comment

It is sometimes very useful to transpose (swap) the rows and columns on a report. Checking the option **Transpose rows/cols** performs this action.



Creating a transposed column report

This screen shows the normal output from a report:

ID #	Priority	Product	Status	Date Created	Days Open
10564	P 3	Tracker	Open	11/5/09 12:00 AM	0
10557	P 3	Tracker	Open	4/17/09 12:00 AM	201
10552	P 3	Tracker	Open	8/13/08 12:00 AM	448
10544	P 1	Tracker	Open	5/26/08 12:00 AM	527
10475	P 4	Tracker Enterprise	Open	2/23/07 12:00 AM	986
10454	P 2	Tracker Enterprise	Open	3/7/06 12:00 AM	1339
10323	P 1	Tracker	Open	4/27/05 12:00 AM	1652
10272	P 1	Tracker	Open	3/20/05 12:00 AM	1690
10269	P 2	Tracker	Open	3/20/05 12:00 AM	1690
10226	P 1	Tracker	Open	1/27/05 12:00 AM	1742
Count: 10 records					

Normal output

This screen shows the same report, with the rows and columns transposed:

ID # ▼	10564	10557	10552	10544	10475	10454	10323	10272	10269	10226
Priority	P 3	P 3	P 3	P 1	P 4	P 2	P 1	P 1	P 2	P 1
Product	Tracker	Tracker	Tracker	Tracker	Tracker Enterprise	Tracker Enterprise	Tracker	Tracker	Tracker	Tracker
Status	Open	Open	Open	Open	Open	Open	Open	Open	Open	Open
Date Created	11/5/09 12:00 AM	4/17/09 12:00 AM	8/13/08 12:00 AM	5/26/08 12:00 AM	2/23/07 12:00 AM	3/7/06 12:00 AM	4/27/05 12:00 AM	3/20/05 12:00 AM	3/20/05 12:00 AM	1/27/05 12:00 AM
Days Open	0	201	448	527	986	1339	1652	1690	1690	1742
Count: 10 records										

Transposed output

Service Level Agreement Reporting

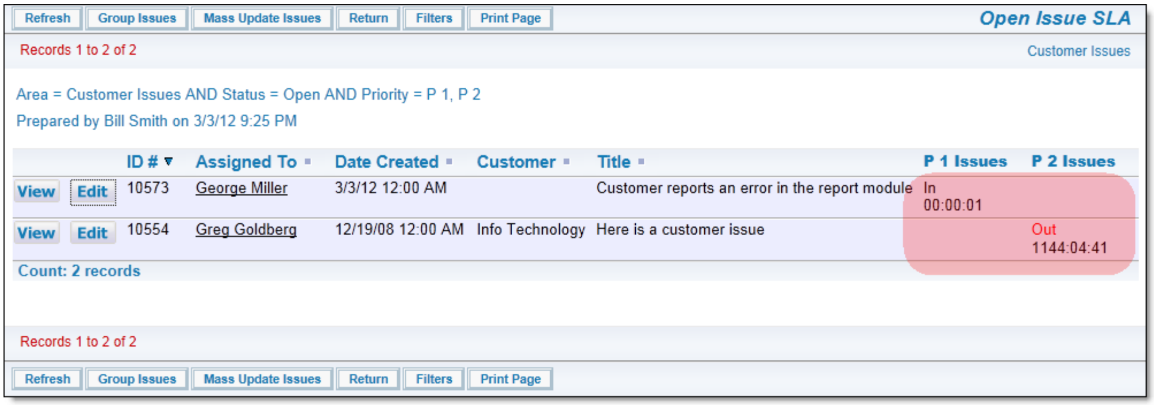
If your administrator has configured your installation to report on Service Level Agreements, a selection list will appear at the top right-hand of the screen, with the title **Use SLA**. This is a list of administrator-defined Service Level Agreement (SLA) criteria. An SLA is a measurement that can display one of three indicators, depending on the criteria and the time the issue has been in a given state. This table shows how your organization may have defined SLAs that are expected to be met.

	Status Transition		
Priority	New-Open	Open-Resolved	Resolved-Closed
P1 Issues	< 2 hours	< 1 day	< 2 days
P2 Issues	< 4 hours	< 5 days	< 30 days
P3 Issues	< 1 day	No commitment	< 180 days

Consider an issue that has a given priority of **P2**. This is governed by the middle row in the table. Your defined workflow is to transition the issue from **New** to **Open** to **Resolved** to **Closed** as your personnel address the issue.

1. If the issue being addressed is in an **Open** status and two hours have elapsed since the issue was created, then it is within normal time limits. In this case, a **green** indicator is displayed on the report
2. If the issue being addressed is approaching the deadline and three hours have elapsed, an **amber** indicator may be displayed on the report to indicate that you are in jeapordy of not meeting the SLA
3. If more than four hours have passed, the issue being addressed has exceeded the agreed SLA. In this case, a **red** indicator is displayed on the report.

You prepare an SLA report like any other column report, but must select one or more **SLA States** to place on the report. The SLA report may be saved and updated like all other reports. The following is an example of output from a SLA report.

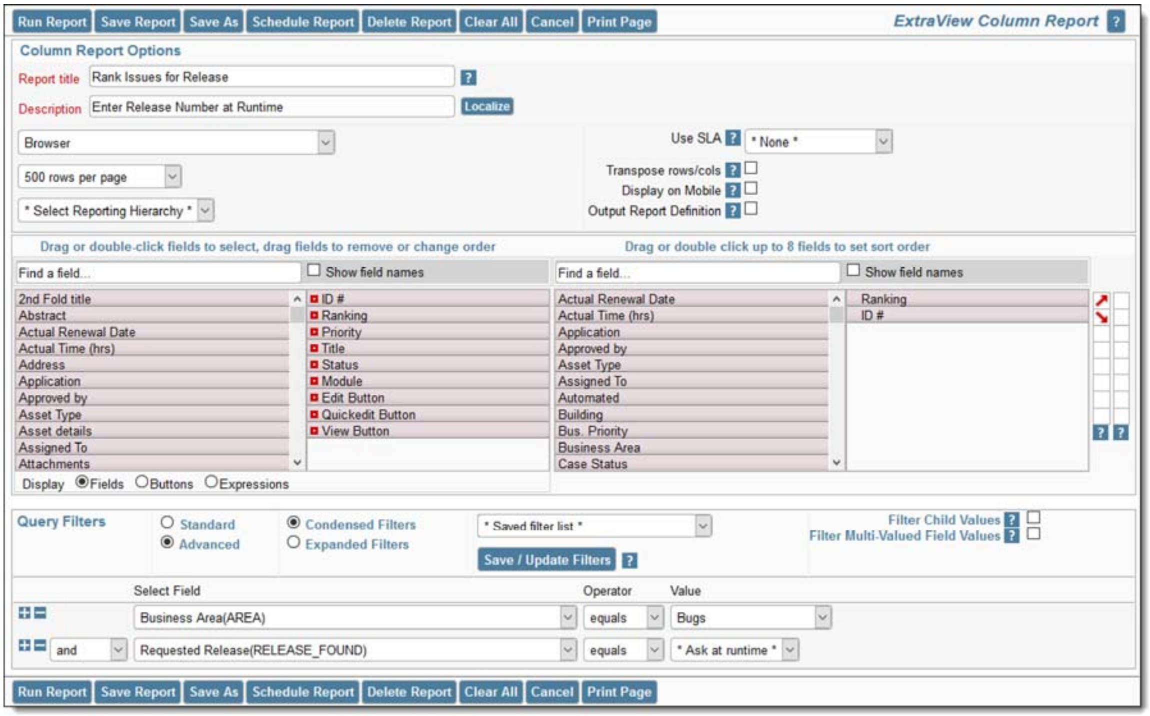


Ranking Reports

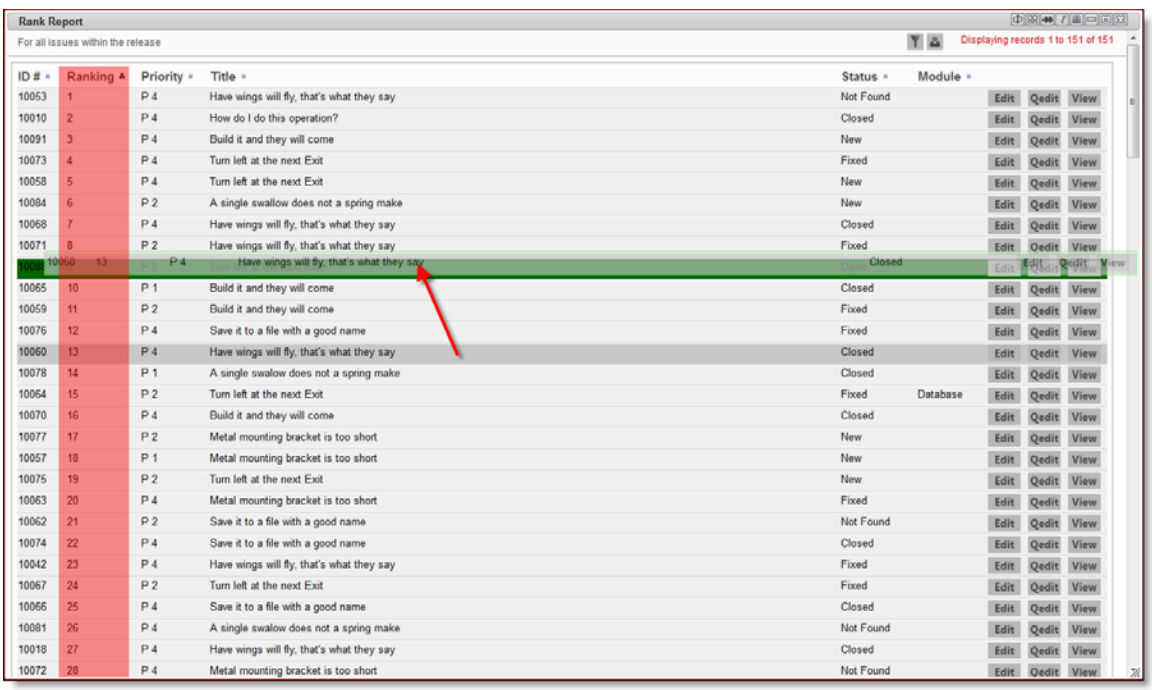
Ranking fields may be set up by the administrator. A ranking field is used to indicate the relative importance of each issue in a collection, for example as part of a product release cycle, indicating the order in which issues may be tackled. Ranking fields may have filters as part of their definition. These filters allow great flexibility, for example to set different rankings for different users. You might for example rank, or order, all the issues assigned to you as part of a product release cycle.

Rank fields may have been placed on *add* and *edit* layouts as well as on reports, and may be manipulated in all these places. However, they really come into their own when you view the collection of issues and their rankings together on a column report. Assuming you are running within a workspace, you can drag any issue within the collection to a different spot, and the rankings are automatically updated to reflect the new position in the report. When you edit a rank field on an *edit* screen, the updates to the ranking will still occur, but you do not have visibility of the ranking of all the other issues in the collection. To set up a ranking report, use the following procedure:

- Create or modify a column report within a workspace. You must be within a workspace to enable drag-and-drop to alter the ranking of the issues within the report
- Place the fields you wish to see along with your ranking field on the report. If you have access to more than one ranking field, only place one on a report, else the results you achieve when modifying a ranking will be ambiguous
- Set the sort order of the report to be the ranking field, ordered ascending
- It is advised to set the number of rows being displayed on a report page to a number higher than the total number of issues on the report output. You cannot drag issues from one report page to another, only within a page
- Save and then run the report
- If the rankings have not been set at this moment, the ranking column will not have any values. If the rankings have been set, then you will see the ranking field for the first issue with a value of 1, the second issue will have a value of 2, etc.
- Drag-and-drop the issues within the report. As you do so, the issues will aiutomatically reorder, showing the rankings in an ascending numeric order.



Ranking Report Editor



Ranking Report Output Showing an Issue Being Dragged

Note the **Ranking** field in ascending order on the report output. The screen shows an issue being dragged and dropped to a higher position. Once dropped, the rankings to all of the issues less than the one on which the issue is dropped will be reordered.

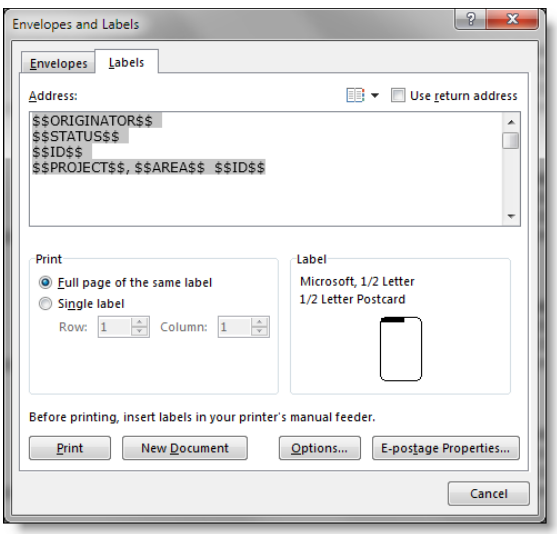
Note: A change to the ranking order does not cause any entries in the history of an issue. Ranking fields are not subject to the normal audits. This is because during a ranking session, there may be thousands of updates to the database. These changes have no real value yet might take a long time to perform.

Merging Data with Microsoft Word Templates

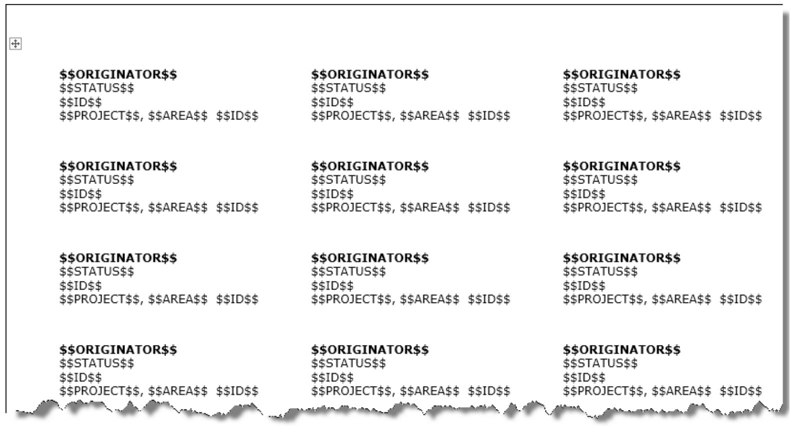
This feature is used to merge ExtraView data produced with a Column report, with a Microsoft Word template that contains mailing (or similar) data. The typical use for this report is to create a Microsoft Word document containing mailing labels, using data from ExtraView issues.

The steps to create the mailing labels are as follows:

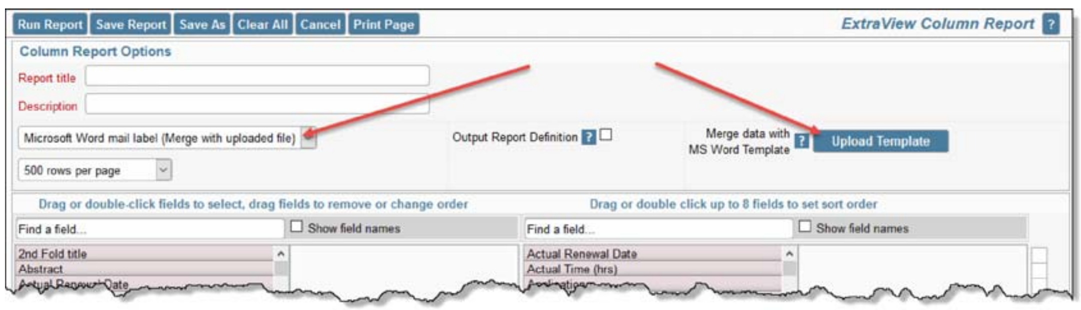
- First, create the Microsoft Word template
  - It is recommended that you work with a standard document to begin with, saving it with a .doc or .docx extension
  - You will design the document with the appropriate mailing labels, using the Microsoft Word MAILINGS function
  - Within the MAILINGS function, you compose each label similar to this screenshot. Notice that you embed the ExtraView field names within $$ tokens



  - Use the **Options** button within the above dialog to select or design the mailing label style you want to use
  - The final template must be saved as a .dot or .dotx Word template file. If you need to make subsequent changes to the template, do not modify the .dot or .dotx file as this will invisibly break the internal structure of the template file. To make changes, edit the .doc or .docx file, then re-save as a .dotx file. The template file will look something like this:



- Now use the column report editor to compose the Column report. The key point is to select the output type as **Microsoft Word mail label (merge with uploaded file)**. You may then upload the .dot or .dotx template file



- Select the fields to be output into the template, and any fields you might want to use to sort the results
- Select the filters you want for the report to obtain the issues for the labels
- When you run the report, the output will be a Microsoft Word document, with the data merged from the ExtraView issues that are selected by the filters of the report.

Merging Data with Microsoft Excel Files

There can be a need to use ExtraView data for reports that cannot be created within ExtraView, but can be created within Microsoft Excel. This feature extends ExtraView so that you can harness all of Microsoft Excel's capabilities in conjunction with any subset of ExtraView data. For example, you might want to use ExtraView data within a pivot table, or you may want to generate charts that are outside the scope of ExtraView's own charting capabilities. Column reports use this feature to achieve this purpose. The procedure to merge ExtraView data with an Excel spreadsheet/workbook is as follows:

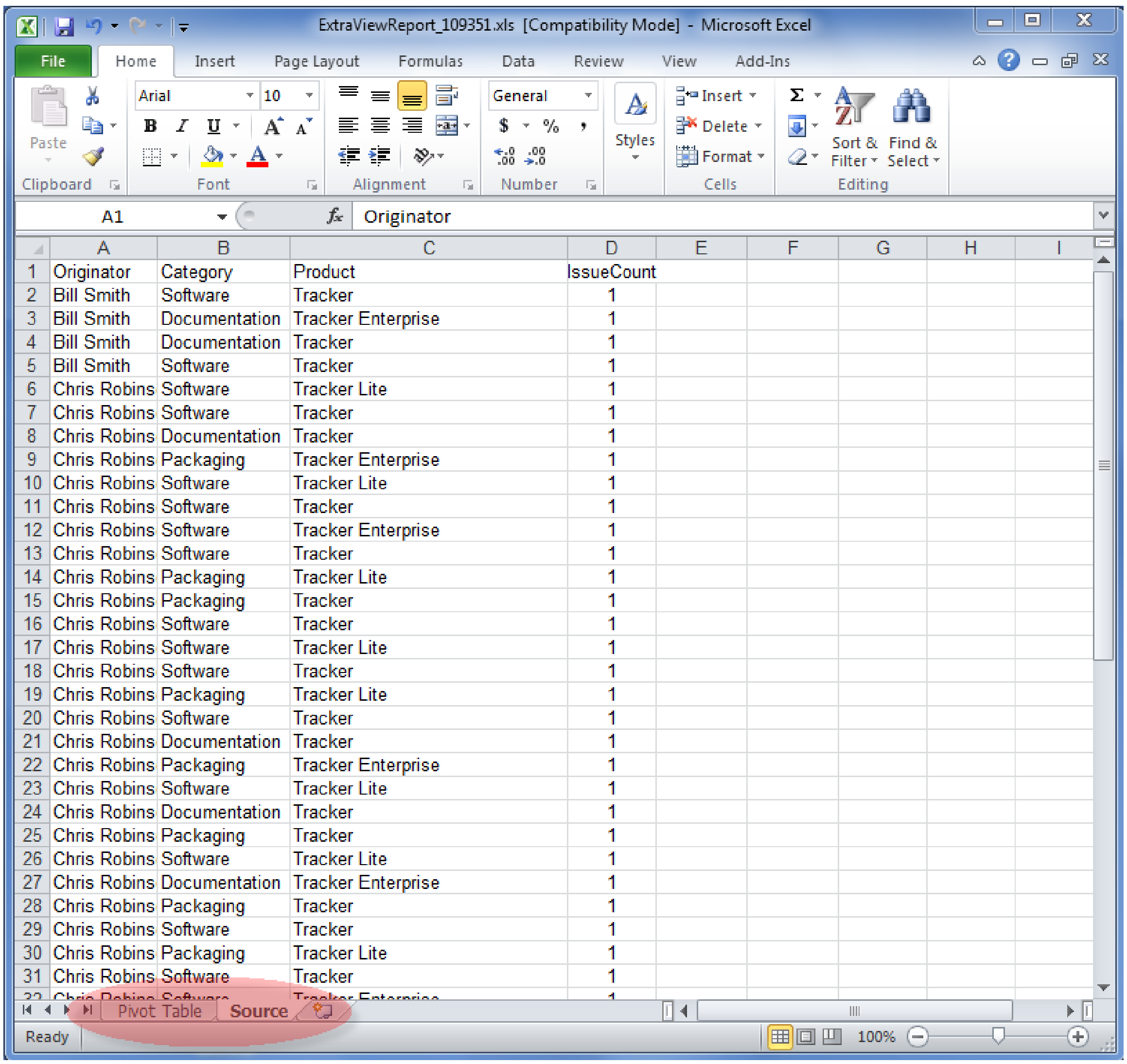
Create the Excel sheet that contains the ExtraView data

Create an individual sheet which will be used to hold the ExtraView data. This will most often be empty of data, but the columns should be formatted as follows to receive data of the correct type.

The columns may also contain Excel formulae. The ExtraView data is merged with the sheet and only overwrites values, not the formulae.

- All ExtraView text type fields do not require any formatting in the sheet
- ExtraView date and day display types will be placed in columns in the sheet as seconds since the epoch
- ExtraView currency and numeric display types will be placed in columns in the sheet as plain numbers
- It is not valid to send buttons, image and document display types to the Excel sheet
- Save the workbook. It must be saved with an extension with an extension of **.xlsx**. The old style **.xls** files are not supported

The following screenshot show how it might look, *after ExtraView populates the data into this sheet.* Again, the sheet should be empty at this stage:

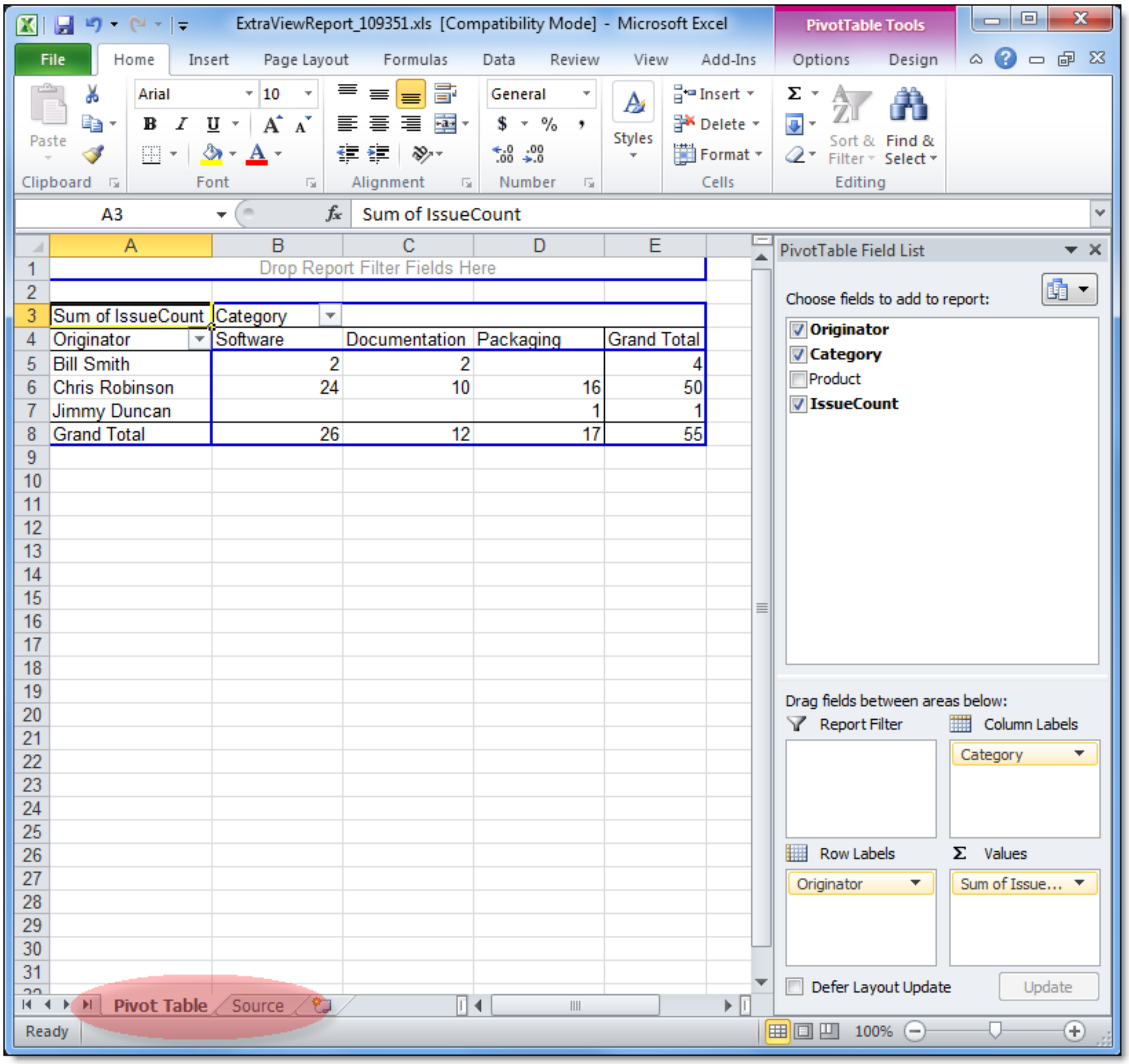


	A	B	C	D
1	Originator	Category	Product	IssueCount
2	Bill Smith	Software	Tracker	1
3	Bill Smith	Documentation	Tracker Enterprise	1
4	Bill Smith	Documentation	Tracker	1
5	Bill Smith	Software	Tracker	1
6	Chris Robins	Software	Tracker Lite	1
7	Chris Robins	Software	Tracker	1
8	Chris Robins	Documentation	Tracker	1
9	Chris Robins	Packaging	Tracker Enterprise	1
10	Chris Robins	Software	Tracker Lite	1
11	Chris Robins	Software	Tracker	1
12	Chris Robins	Software	Tracker Enterprise	1
13	Chris Robins	Software	Tracker	1
14	Chris Robins	Packaging	Tracker Lite	1
15	Chris Robins	Packaging	Tracker	1
16	Chris Robins	Software	Tracker	1
17	Chris Robins	Software	Tracker Lite	1
18	Chris Robins	Software	Tracker	1
19	Chris Robins	Packaging	Tracker Lite	1
20	Chris Robins	Software	Tracker	1
21	Chris Robins	Documentation	Tracker	1
22	Chris Robins	Packaging	Tracker Enterprise	1
23	Chris Robins	Software	Tracker Lite	1
24	Chris Robins	Documentation	Tracker	1
25	Chris Robins	Packaging	Tracker	1
26	Chris Robins	Software	Tracker Lite	1
27	Chris Robins	Documentation	Tracker Enterprise	1
28	Chris Robins	Packaging	Tracker	1
29	Chris Robins	Software	Tracker	1
30	Chris Robins	Packaging	Tracker Lite	1
31	Chris Robins	Software	Tracker	1

The Excel data sheet

Create the remainder of the Excel workbook

Create an additional sheet, or sheets, within the same Excel spreadsheet, which contain the reports or other Excel objects. These should source the ExtraView data by referencing a data range within the first sheet you created. An example pivot table might look like this:



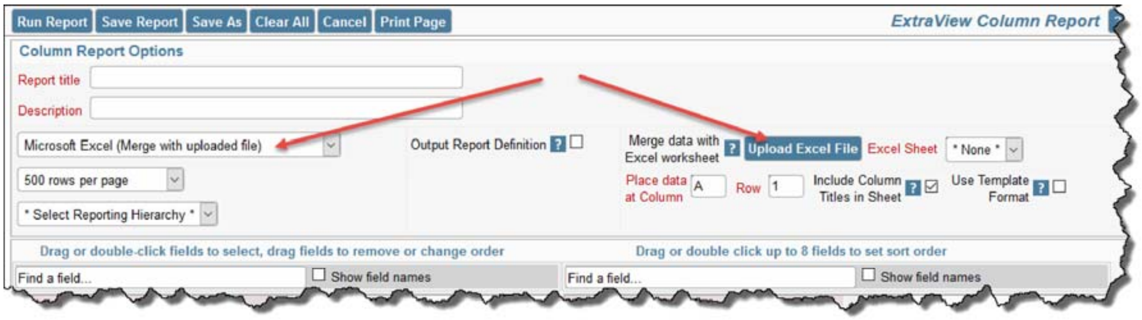
The Excel output report

Save the spreadsheet

Note that the spreadsheet must be saved as type XLS, not type XLSX. This is due to a limitation in third-party utility software used to manage the Excel spreadsheet within the ExtraView server.

Upload the spreadsheet to ExtraView

Now, you upload the saved spreadsheet into ExtraView. Create a new Column report, then select **Microsoft Excel (Merge with uploaded file)** as the output format. Most of the report creation is identical to creating other column reports.



Creating the report

- Click the button to upload the Excel workbook / spreadsheet. This takes a copy of the spreadsheet from your local computer and places it in the database on the ExtraView server
- The titles to all the sheets contained within the Excel workbook are displayed in the select list. Choose the sheet that is to be the destination for the ExtraView data
- The default is that the ExtraView data will be placed at the top left-hand corner of the sheet, beginning with cell **A1**. You may alter the beginning cell by placing the data at any other row and column in the sheet
- Use the checkbox **Include Column Titles in Sheet** to indicate whether you want the column titles from the ExtraView data to be placed in the sheet. Note that for most purposes you want the column titles to match up with the titles as they will be used in the other sheets inside the Excel workbook. The matching is case sensitive
- The checkbox **Use Template Format** gives control of the data formatting within the spreadsheet that is output. If this box is not checked, then ExtraView's field formats are used. If this is checked, then the formats of the data within the spreadsheet are observed and used. This has uses to control items such as the format of dates in the spreadsheet. You might want to use the format mandated by the cell formats in the spreadsheet, or you might want to use the user's date format as specified by their personal options.
- Select the columns for the report that are to be used to fill in the Excel data sheet
- Apply any filters required
- Save the report in the normal way.

Run the report

When you run this report, ExtraView will take the data returned by the query, and populate the Excel sheet. The report is then downloaded for you, in the form of a standard Excel spreadsheet.

Tips

- Wrapping text within Excel cells - it is recommended that you highlight all rows within your spreadsheet and set the text wrapping option before saving and uploading to ExtraView. If you do not do this, then you have to double-click within the cell in the downloaded report before the text wrapping works

- Custom date formats - it is not recommended that you set your personal options within ExtraView to use a custom date format. Excel does not understand all the possible custom date masks that can be used.

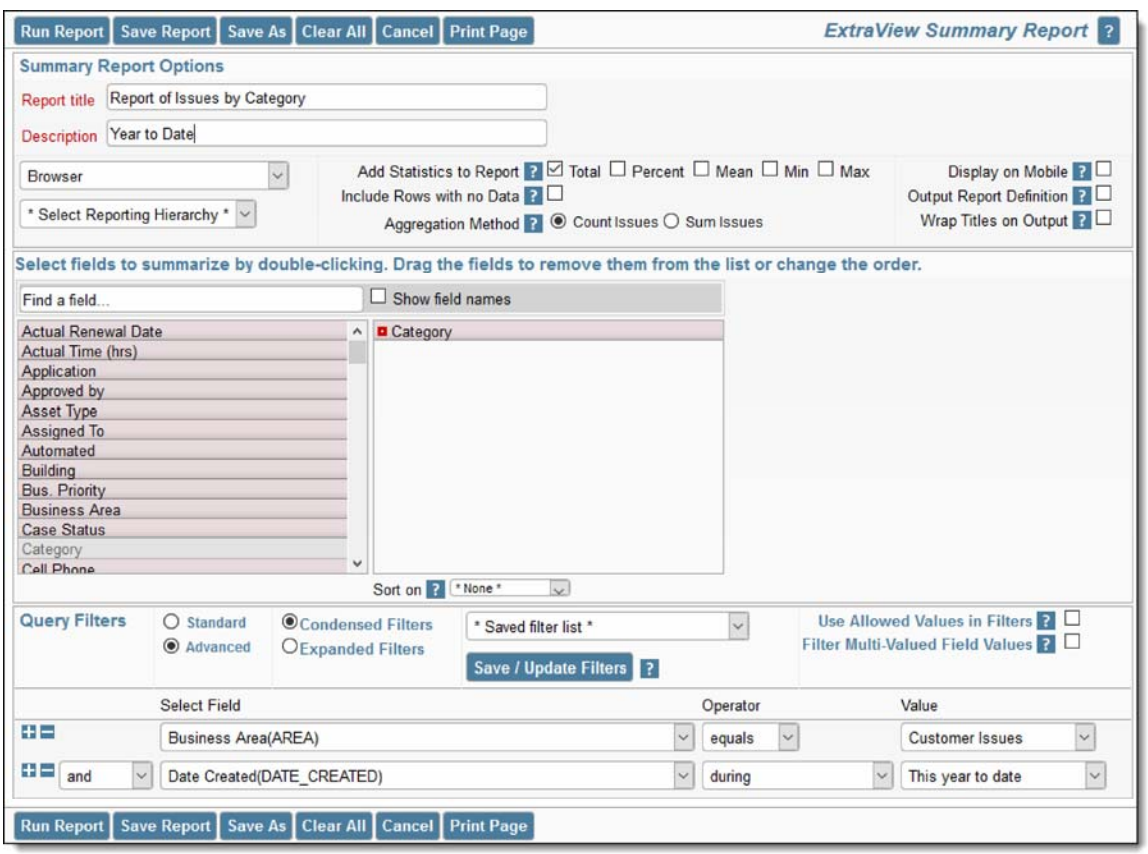
Summary Reports

When selected, this action creates a report where ExtraView will provide a count of the number of issues under different headings. Summary reports can be saved as personal or public reports. Examples include:

- A breakdown of how many issues have been fixed by each engineer in a given period
- The number of issues for each status, broken down by owner
- A breakdown by severity level of all open issues in the system

Using Summary reports, project or area managers can have a snapshot, at any time of the current overall project status. This sort of information is invaluable for producing internal status reports that are backed by real data.

You are able to select from any fields to which you have read permission, and which are able to be summarized. List values are those which are most commonly summarized. To prepare a new Summary report, choose the **Create New Summary Report** option. The screen presented to you will be similar to the following:



Creating a new summary report

Options

- There is a button to the right of the **Report Title** that appears when you are editing an existing report. When you place your mouse over this button, you will see who created the report, who last updated the report and the dates when these actions occured. This is most useful for managing public reports
- There is an option in the preparation of Summary Reports, to **Add Statistics to Report**. The default option is to display the Total count. You can also elect to display the Percentages, Mean, Minimum, Maximum of the issues generated on the report
- The option **Include Rows with no Data** allows you to include rows within the results that had no results. Although this is not normally useful, consider the use case where you want to use the report as a target for issues that are going to be dropped on the report. Including zero rows on the report allows you to drop issues onto reports that have no value up to the time you drop the issues
- The **Aggregation Method** allows you to either produce a summary report that counts the number of issues within each row of the report, or accumulates the total of a numeric field within the row of the report. If you choose to *Sum Issues*, then a list of all the numeric fields appears. Choose the field you want to total on the report output
- The **Display on Mobile** button will allow the report to appear on a mobile phone or tablet
- The **Output Report Definition** button places the options and filters used in the production of the report at the end of the output
- The option to **Wrap Values on Output** changes the default presentation of values within fields. The default presentation is that the values are displayed on a single line without line breaks, even though the value contains more than one word. If you enable this option, the text values used as row headings will be wrapped. This is useful if you are summarizing long text values. This is not a frequent use case, but when needed, this option improves the readability of the report
- If your administrator has enabled the option that allows you to search for users that have been disabled, you will see a checkbox option that allows you to **Show Inactive Users**. When you click in the checkbox, the screen will refresh and all user lists will show inactive as well as active users. Note that this option only works with the Standard Query screen, and does not work with the Advanced Query screen.

Selecting columns to summarize and display

- Select the columns that you require on your report, by double-clicking on each field name. If you want to alter the order of the fields being summarized on the report, you can click on a field in the right-hand box and drag it to a new position. To remove a field from the report, drag it out of the box
- You can choose from one to ten columns to summarize on a single summary report
- The value columns and the relevant statistical columns may be sorted by clicking on their title

Refresh | Return | Filters | Print Page

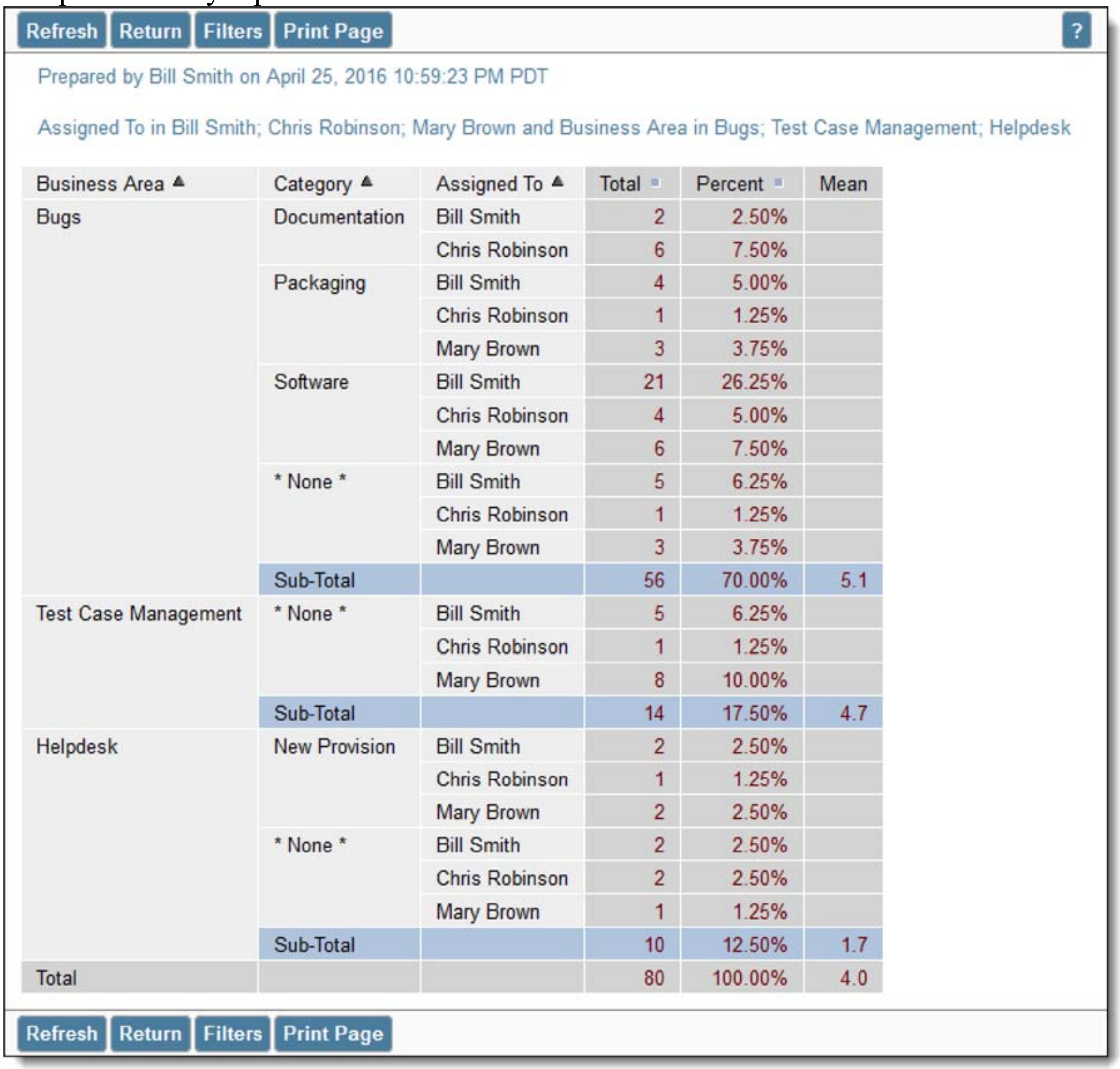
Prepared by Bill Smith on April 25, 2016 11:02:12 PM PDT

Assigned To in Bill Smith; Chris Robinson; Mary Brown and Business Area in Bugs; Test Case Management; Helpdesk

Business Area ▲	Category ▲	Assigned To ▲	Total
Bugs	Documentation	Bill Smith	2
		Chris Robinson	6
	Packaging	Bill Smith	4
		Chris Robinson	1
		Mary Brown	3
	Software	Bill Smith	21
		Chris Robinson	4
		Mary Brown	6
	* None *	Bill Smith	5
		Chris Robinson	1
		Mary Brown	3
	Sub-Total		56
Test Case Management	* None *	Bill Smith	5
		Chris Robinson	1
		Mary Brown	8
	Sub-Total		14
Helpdesk	New Provision	Bill Smith	2
		Chris Robinson	1
		Mary Brown	2
	* None *	Bill Smith	2
		Chris Robinson	2
		Mary Brown	1
	Sub-Total		10
Total			80

Refresh | Return | Filters | Print Page

Sample summary report



Business Area	Category	Assigned To	Total	Percent	Mean
Bugs	Documentation	Bill Smith	2	2.50%	
		Chris Robinson	6	7.50%	
	Packaging	Bill Smith	4	5.00%	
		Chris Robinson	1	1.25%	
		Mary Brown	3	3.75%	
	Software	Bill Smith	21	26.25%	
		Chris Robinson	4	5.00%	
		Mary Brown	6	7.50%	
	* None *	Bill Smith	5	6.25%	
		Chris Robinson	1	1.25%	
		Mary Brown	3	3.75%	
	Sub-Total		56	70.00%	5.1
Test Case Management	* None *	Bill Smith	5	6.25%	
		Chris Robinson	1	1.25%	
		Mary Brown	8	10.00%	
	Sub-Total		14	17.50%	4.7
Helpdesk	New Provision	Bill Smith	2	2.50%	
		Chris Robinson	1	1.25%	
		Mary Brown	2	2.50%	
	* None *	Bill Smith	2	2.50%	
		Chris Robinson	2	2.50%	
		Mary Brown	1	1.25%	
	Sub-Total		10	12.50%	1.7
Total			80	100.00%	4.0

Sample summary report with statistics

Column width on the report output

By default, the width of columns on browser output are not set, and the user's browser determines the width of each column using its own algorithms. Most of the time, this works well, but there are times when you might want to accurately fix the width of the Y axis titles being displayed on the output. Right-click on the red button by the field name you selected for the report, and one of the fields allows you to fix the width of the column, measured in characters. Microsoft Word and PDF column width output are set using the same option. Note that you may also use the report option titled **Wrap Titles on Output** to assist in controlling the width of columns on the output. When you both set the width of a column and set the **Wrap Titles on Output** option, the column width setting takes precedence.

Summary Reports and Repeating Records

If you prepare a summary report, and include one or more fields from the repeating record as any the fields that is to be summarized, then it is possible (indeed probable) that an individual record will be summarized into more than one line of the summary report that is displayed.

This works without problem, and you can drill down from an individual line of the report to see the issues that made up the total for the line. The totals for the displayed summary report will be accurate totals of the lines of the report. If you drill down into the total and grand total lines of the displayed summary report, the issues that were included on different lines of the summary report are not repeated as this would be confusing. However, this does lead to the possibility that there will be fewer issues on the drill-down report than appear in the total of the summary report.

For example, you may see a grand total of 135 issues on a summary report, but when you drill down into this total, there may only be 125 issues displayed. This probably indicates that 10 of the issues rightfully appeared in two rows of the summary report.

Summary Reports and Date Fields

Date fields are stored within ExtraView, with the time component accurate to the nearest millisecond. Therefore, if you want to summarize on a date field, you should recognize that the count of issues with the identical date is likely to be one! This may be a little surprising at first, but it is accurate. ExtraView provides alternative methods for summarizing on date fields, so you can answer questions such as “How many issues were opened by each support technician on a given day”? Inbuilt date fields such as “Date Created” have an alternative form, which is the truncated version of the date, i.e. with no time component. If your administrator has given you access to these, then summarizing on this will give a total account within a day. Also, if your administrator configured a date field such that the time component is ignored, then the fields will summarize by the complete day.

If you summarize on a normal date field, the behavior also depends on your personal time format, stored within your personal information. If you have a date format that includes the time within the day, the report will most likely show you a single row for each date entry, with a count of 1. The date displayed on each row will show the time. If your personal date format does not include time, then all the date values are consolidated onto a single label for all the rows of the report, and you will still see one row for each date within the report.

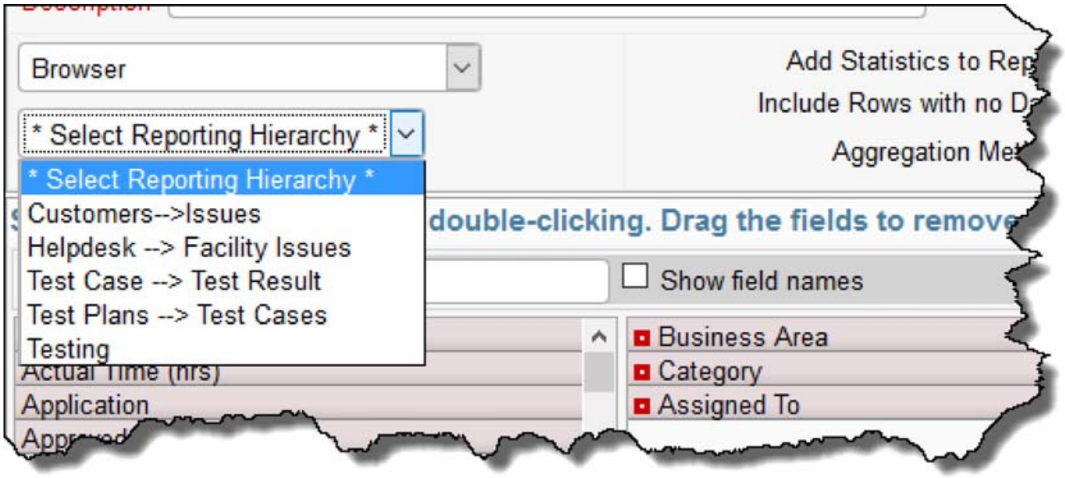
Displaying Only the Top Summarized Results

It can be useful when displaying a summary report to only display the most significant results. For example, a summary report may display 100 rows, but you might only be interested in the ten rows with the highest values. To achieve this, there is filter that is normally used in conjunction with the advanced query mode, titled **Top-n rank filter**. For the above example, if you set the filter to **Top-n rank filter less than or equal to 10**, then only the ten highest values will be displayed. If you set the filter to be **Top-n rank filter equal to 3** only the third highest value will be displayed. Note that this feature is not supported on all databases.

If your installation is utilizing MySQL or Apache Derby as its underlying database, then this feature is inoperable.

Hierarchical Summary Reports

If your administrator has defined hierarchies on which you can report, you will see an additional prompt on the report editor screen:

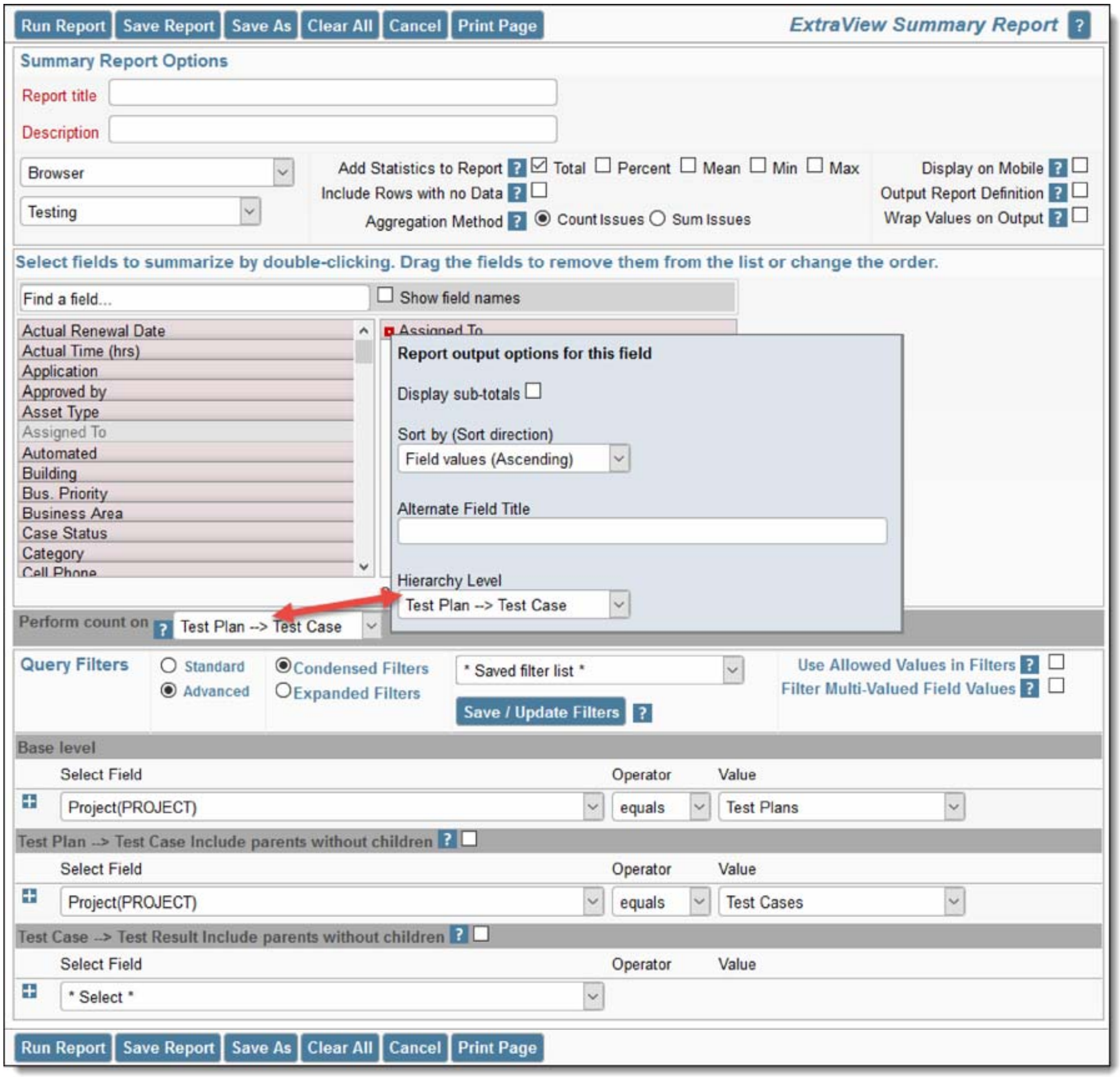


Reporting on hierarchies within summary reports is similar to the way they are defined for column reports. The key difference is that you are only required to select the filters for each level in the hierarchy. These filters will be applied to each level of the hierarchy for the preparation of the data to be placed on the report. The report output will look very similar to a standard summary report, except that the additional filters are applied.

Grouping on Multiple Levels of Hierarchical Filters

This feature produces a standard summary report for the output, but allows you to group the results using filters at each level of the report hierarchies.

- As an example, we will utilize a hierarchy with 3 levels representing an organization that tests software. The organization creates *Test Plans* and *Test Cases*. Some subset of the available *Test Cases* are placed within a *Test Plan*, in a parent-child relationship. When *Test Cases* are executed, a *Test Result* is created as a child relationship of the *Test Case*
- To represent this, we have the following reporting hierarchies defined
    - *Tests*, which uses the relationship *Test Plans --> Test Cases* at the topmost level and *Test Cases --> Test Results* at the second level
    - *Test Plans --> Test Cases* as a single-level reporting hierarchy
    - *Test Cases --> Test Results* as a single-level reporting hierarchy



To prepare and run a summary report that groups on multiple levels of hierarchical filters, perform the following steps:

- Create a new summary report
- Select Condensed Query Filters
- Select Advanced Query Screen
- Select the report hierarchy titled *Tests*
- Select **Assigned To** as the field to summarize and group by. You group by this field by right-clicking on the red button by the field and selecting *Test Plan -->Test Case* as the hierarchy level
- Beneath the field list, you see the *Perform count on* select list. Again, select the *Test Plan --> Test Case* entry. The important point is that this is the same hierarchy level that you chose in the last step
- Choose the base level query filters. E.g. select the filter **PROJECT = Test Plans** for the base level
- For the *Test Plan --> Test Case* level of the hierarchical filters, select the filter **PROJECT = Test Cases**

- For the *Test Case --> Test Result* level of the hierarchical filters, select the filter **PROJECT = Test Results**
- Run the report.

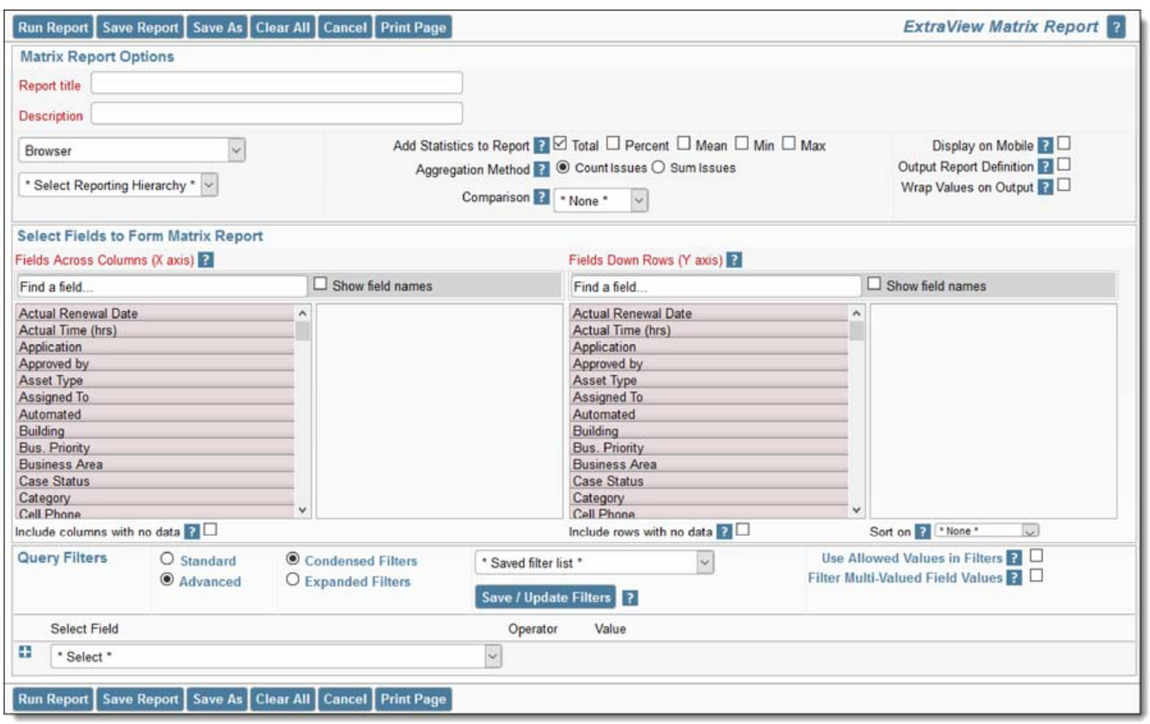
Matrix Reports

When selected, this feature creates a report where ExtraView will display a results grid with one or more selected fields across the page and one or more selected fields down the page. When used with the aggregation method to *count issues*, this report will produce results identical to running a summary report with two selected columns, but rather than the results being displayed in a column, they are displayed in a grid form. Examples of useful matrix reports include:

- A report of statues of issues by customer
- Break down the number of issues by priority, by product
- Breakdown the number of reported issue by customer for the last month
- Display a count of the issues created by country, by region over each month for the last two years.

You are able to select from any fields to which you have read permission, and which are able to be summarized and counted. For example, you can typically summarize on different values in a list, but cannot summarize on text fields.

To prepare a new Matrix report, choose the **Create New Matrix Report** option. The screen presented to you will be similar to the following:



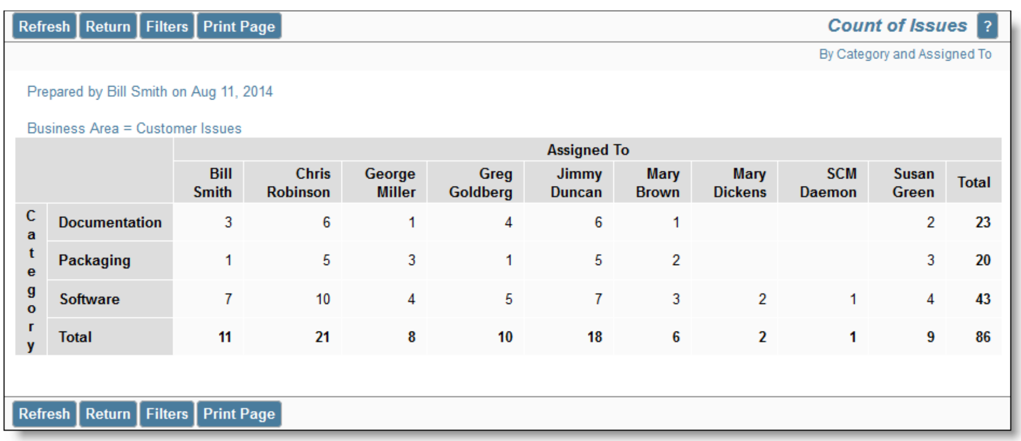
Creating a new matrix report

Selecting columns to summarize and display

- There are two basic counting mechanisms for matrix reports. You can simply count the number of issues that are at the intersection of the two axes you select and filtered by your selection, or you can sum the values within a specific field that are at the intersection of the two axes. These produce quite different results.
- Select the columns that you require on your report, by selecting up to four field names from the **Field across (X axis)** list, and then select up to four fields from the **Field down (Y axis)** list
- You can use the options **Include columns with no data** and **Include rows with no data** to display columns and rows on the report that have zero values. The default is that if all values for a column or all values for a row are zero, then that column or row will not be displayed. If the field you are using for the X axis or the Y axis is not of a list type, then this option is ignored. For example, if you are summarizing on a text field, you cannot include rows or columns with no data. This is because you may be selecting a huge number of values with no data, a circumstance that will inevitably lead to a report that does not display reasonable data.

Columns on the report output may be sorted by clicking on the column title. When there is more than one field on the Y axis, and you have selected an option to display sub-totals, then the sort takes place within each group of results.

The following two screenshots show a matrix report with the same axes selected, **Assigned To** and **Category**. The first report shows a count of the issues within each **Category** that are **Assigned To** each user. The second report is summing the **Time Spent** within the issues by each of the **Assigned To** personnel within each **Category**.



		Assigned To									
		Bill Smith	Chris Robinson	George Miller	Greg Goldberg	Jimmy Duncan	Mary Brown	Mary Dickens	SCM Daemon	Susan Green	Total
Category	Documentation	3	6	1	4	6	1			2	23
	Packaging	1	5	3	1	5	2			3	20
	Software	7	10	4	5	7	3	2	1	4	43
	Total	11	21	8	10	18	6	2	1	9	86

Sample matrix report counting issues

By Category and Assigned To

Prepared by Bill Smith on Aug 11, 2014

Business Area = Customer Issues

		Assigned To									
		Bill Smith	Chris Robinson	George Miller	Greg Goldberg	Jimmy Duncan	Mary Brown	Mary Dickens	SCM Daemon	Susan Green	Total
Category	Documentation	11	5	0	14	0	3	0	0	0	33
	Packaging	4	0	5	4	4	4	0	0	4	25
	Software	15	13	7.5	17	7	6	0	1	0	66.5
	Total	30	18	12.5	35	11	13	0	1	4	124.5

Sum by: Actual Time (hrs)

Refresh Return Filters Print Page

Sample matrix report summing issues

Column width on the report output

By default, the width of columns on browser output are not set, and the user's browser determines the width of each column using its own algorithms. Most of the time, this works well, but there are times when you might want to accurately fix the width of the Y axis column titles being displayed on the output. Right-click on the red button by the field name you selected for the report, and one of the fields allows you to fix the width of the column, measured in characters. Microsoft Word and PDF column width output are set using the same option. Note that you may also use the report option titled **Wrap Titles on Output** to assist in controlling the width of columns on the output. When you both set the width of a column and set the **Wrap Titles on Output** option, the column width setting takes precedence.

Multiple Field Breakdowns on Matrix Reports

You may select up to four fields on each axis of a matrix report, and ExtraView will automatically categorize the results. As an example, here is a report with two fields on each of the axes. The X axis is displaying Category within Business Area, and the Y axis is displaying Assigned To within Status.

		Bugs				Helpdesk			Total
Status	Assigned To	Documentation	Hardware	Packaging	Software	Fault in service	New Provision	Question	
New	Bill Smith	1			1				2
	Chris Robinson				2				2
	George Miller		2		3		1		6
	Jimmy Duncan		1	3	5				9
	Mary Brown			2	3				5
	Mary Dickens				2				2
	SCM Daemon			1					1
	Susan Green			1			1		2
	* None *					2	1	1	4
Open	Bill Smith		1		4				5
	Chris Robinson			1	2		1		4
	George Miller		1			1			2
	Jimmy Duncan			1	2		2		5
	Mary Brown				2		2		4
	Mary Dickens				1				1
	Sally Hunt		1						1
	Susan Green	1		1					2
	* None *					1			1
Total		2	6	10	27	4	8	1	58

Sample matrix report with 2 fields selected for each axis

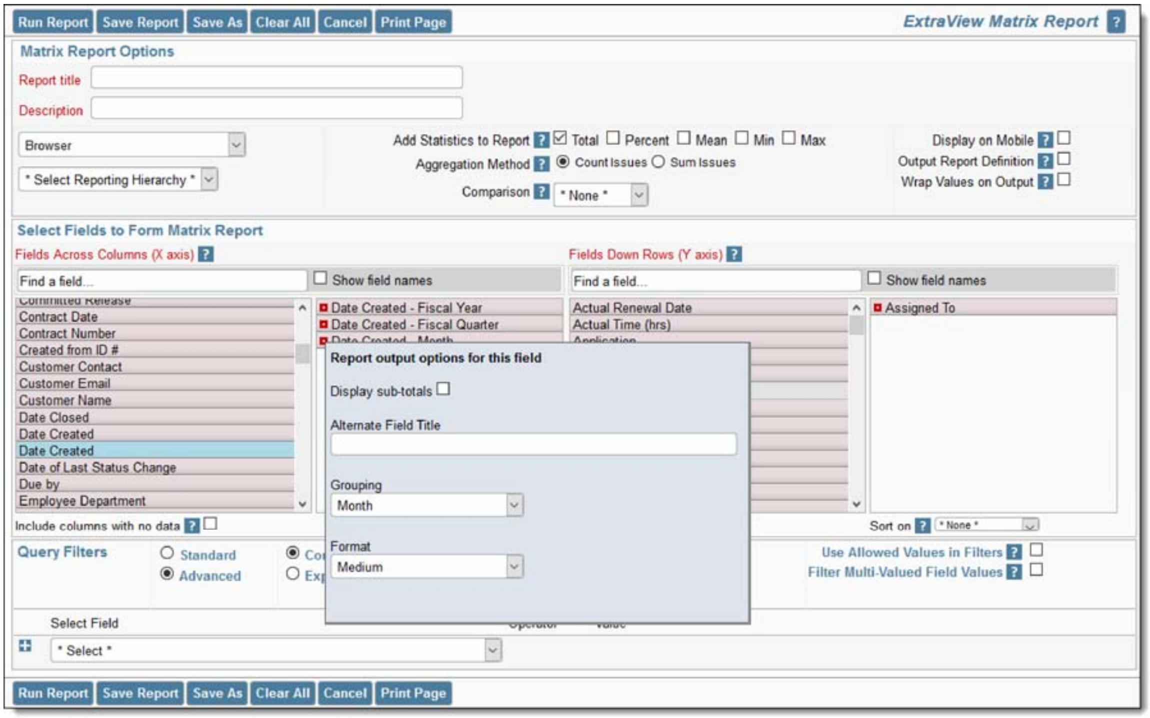
Matrix Reports and Date Fields

Date fields have special properties when used on matrix reports. This helps you produce a variety of time-based reports, with the date fields being used on the X axis as column headings. The key properties are:

- You can group all the results for a time period. For example, you can group by week, or group by month, or group by year. Right-click the small red button at the left of the field name to popup a panel with this option
- You can select the same date field more than once for the X axis, then group the results. For example, you can group results by month within years, or by weeks within months within years Right-click the small red button at the left of the field name to popup a panel with this option
- The groupings may be made on calendar or fiscal time periods. There are also other groupings basing results on days of the month or week and on month and year starting and ending dates Right-click the small red button at the left of the field name to popup a panel with this option
- You can select up to four levels for groupings
- You can sub-total the results at any or all the grouping levels Right-click the small red button at the left of the field name to popup a panel with this option
- You can alter the format of the date field on the column heading. Select between Short, Medium and Long. As an example, the month of January will appear as J, Jan or January, depending on which format is selected Right-click the small red button at the left of the field name to popup a panel with this option
- You may check the box on the report editor to **Include columns with no data**. This will fill in periods with no data. For example, if you have a report where you want to display all the months of a year, but only some columns have data, you will still see a column header for each month of the year

Example

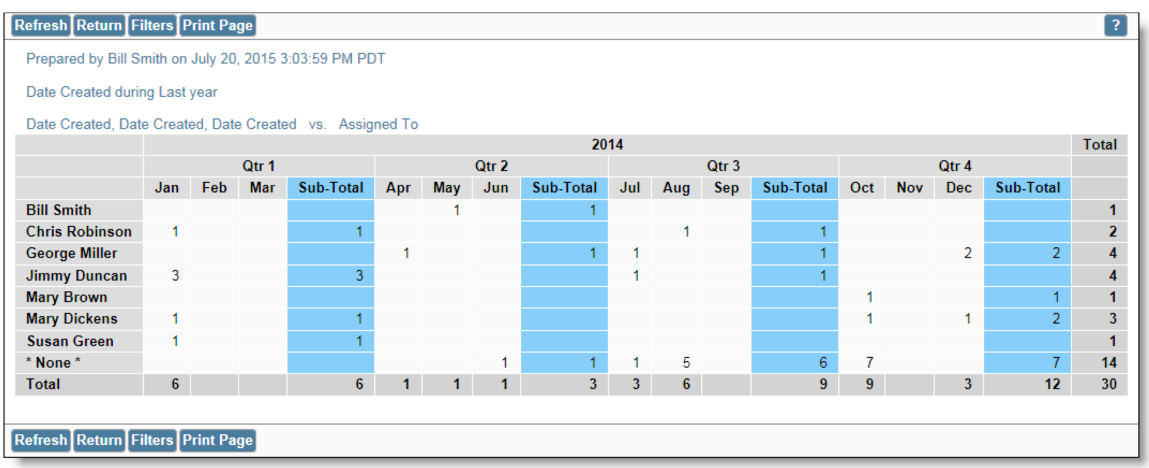
The objective is to prepare a report for last year, displaying sub-totals by quarter. The report will show the number of issues assigned to each person in each time period.



Note the following:

- The **Date Created** field was selected 3 times for the X axis
- Use the popup to group the first selection to *Year*, the second to *Quarter* and the third to *Month*
- On the **Date Created - Month** popup, select the **Display sub-totals** checkbox
- Select the **Assigned To** field for the Y axis
- Use a query filter of **Date Created during Last year** to define the time period

This produces a report similar to the output below.


Refresh Return Filters Print Page

Prepared by Bill Smith on July 20, 2015 3:03:59 PM PDT

Date Created during Last year

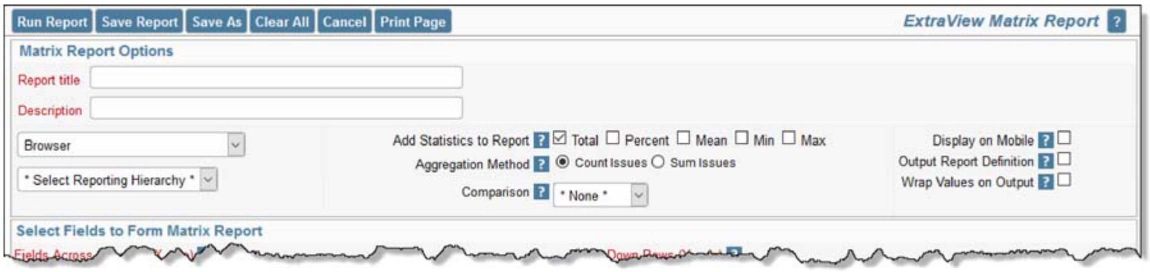
Date Created, Date Created, Date Created vs. Assigned To

	2014																Total
	Qtr 1				Qtr 2				Qtr 3				Qtr 4				
	Jan	Feb	Mar	Sub-Total	Apr	May	Jun	Sub-Total	Jul	Aug	Sep	Sub-Total	Oct	Nov	Dec	Sub-Total	
Bill Smith						1		1									1
Chris Robinson	1			1						1		1					2
George Miller					1			1	1			1			2	2	4
Jimmy Duncan	3			3					1			1					4
Mary Brown													1			1	1
Mary Dickens	1			1									1		1	2	3
Susan Green	1			1													1
*** None ***							1	1	1	5		6	7			7	14
Total	6			6	1	1	1	3	3	6		9	9		3	12	30

Refresh Return Filters Print Page

Adding Statistics to Matrix Report Output

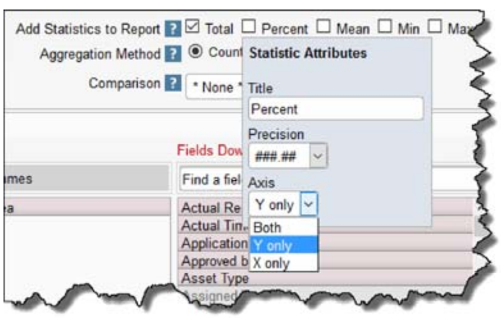
There are several options with the **Add Statistics to Report** checkboxes. You can elect to add Totals, the Percentage, the mean, the minimum, or the maximum to the report output. This may look similar to this:



Using the Report Editor to Define the Statistics to be Added to the Report Output

You may click on each of the statistical methods, bringing up a popup window where you may alter the title of the column and set the decimal precision of the displayed results. You may also set whether to display the statistics on the X axis, the Y axis or both axes.

Also, note the select list directly beneath the **Fields Down Rows (Y axis)** field box. This offers the ability to provide an initial sort on the columns displaying the statistical output. You may sort any of the columns in an ascending or descending order when the report is first displayed. Once displayed, you may click on the column titles to resort the report.



Formatting the Statistical Output on the Report

	P 1	P 2	P 3	P 4	Total	%	Mean
Bill Smith	8	11	16	19	54	18.56%	13.5
Chris Robinson	1	4	24	1	30	10.31%	7.5
George Miller	3	16	24	8	51	17.53%	12.75
Greg Goldberg		3	9	4	16	5.50%	4
Jimmy Duncan	5	9	20	22	56	19.24%	14
Mary Brown	4	5	9	2	20	6.87%	5
Mary Dickens	1	3	4	3	11	3.78%	2.75
SCM Daemon		1	2		3	1.03%	0.75
Sally Hunt	5			2	7	2.41%	1.75
Susan Green	1	11	9	17	38	13.06%	9.5
太郎 日本		1		1	2	0.69%	0.5
* None *		2	1		3	1.03%	0.75
Total	28	66	118	79	291	100.00%	72.75

Statistics on the Y Axis of a Matrix Report

Aggregation Method

The default option is that the summary report produces a *count* of issues within each cell of the matrix. If you select the option to *sum* the issues, you are asked to select a numeric field. ExtraView will then sum the values within each cell, for the count of issues.

Display on Mobile

Check the option if you want the report to be available within mobile clients.

Output Report Definition

Checking this option displays the report selected options and fields along with the filters used at the end of the report.

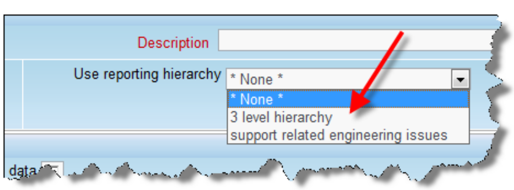
Comparisons with Prior Periods

The report editor screen has an option that allows you to make a comparison of the results on your matrix report with either the prior period you have selected, or with the same period in the previous year. The output will then show three sections side-by-side - the results selected, the prior results and the difference.

Notice that when making prior period comparisons, the report option to **Include rows with no data** is purposely enabled. This is to ensure that the same set of rows are displayed in the results and the prior results. If this did not happen, then it is entirely possible that the rows of data would not line up correctly when you view the report.

Hierarchical Summary Reports

If your administrator has defined hierarchies on which you can report, you will see an additional prompt on the report editor screen:

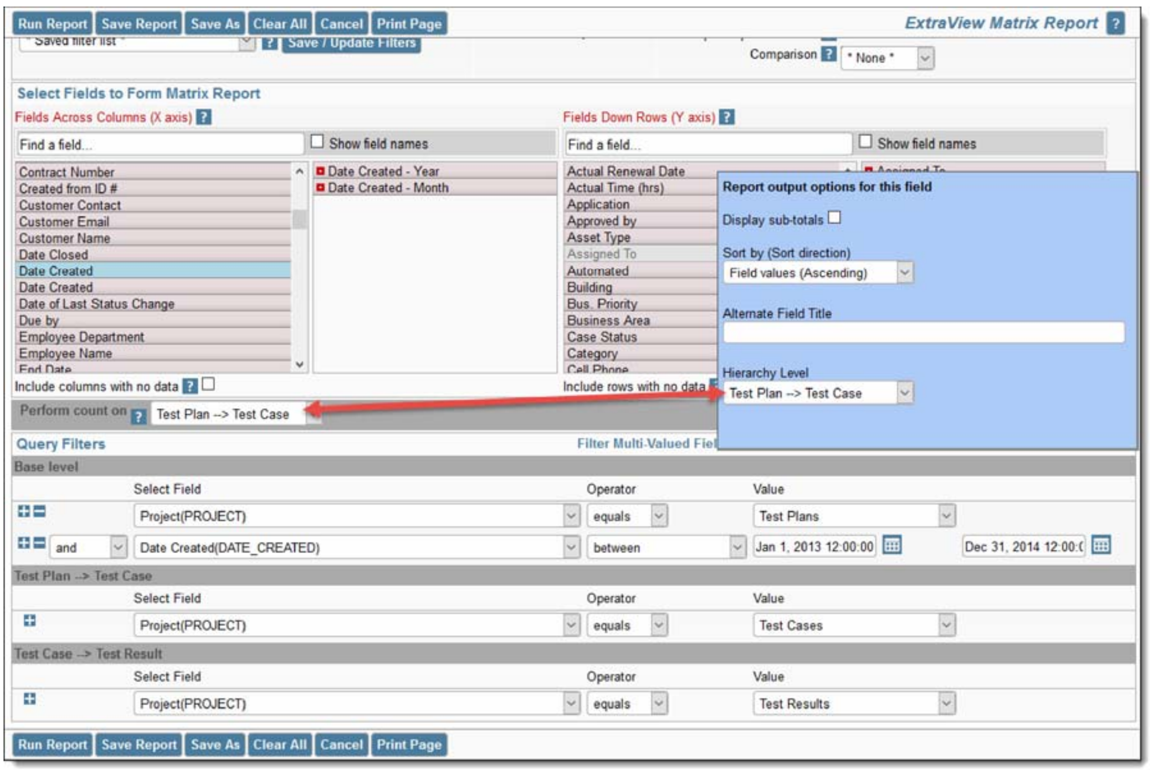


Reporting on hierarchies within matrix reports is similar to the way they are defined for column reports. The key difference is that you are only required to select the filters for each level in the hierarchy. These filters will be applied to each level of the hierarchy for the preparation of the data to be placed on the report. The report output will look very similar to a standard matrix report, except that the additional filters are applied.

Grouping on Multiple Levels of Hierarchical Filters

This feature produces a standard matrix report for the output, but allows you to group the results using filters at each level of the report hierarchies.

- As an example, we will utilize a hierarchy with 3 levels representing an organization that tests software. The organization creates *Test Plans* and *Test Cases*. Some subset of the available *Test Cases* are placed within a *Test Plan*, in a parent-child relationship. When *Test Cases* are executed, a *Test Result* is created as a child relationship of the *Test Case*
- To represent this, we have the following reporting hierarchies defined
    - *Tests*, which uses the relationship *Test Plans --> Test Cases* at the topmost level and *Test Cases --> Test Results* at the second level
    - *Test Plans --> Test Cases* as a single-level reporting hierarchy
    - *Test Cases --> Test Results* as a single-level reporting hierarchy



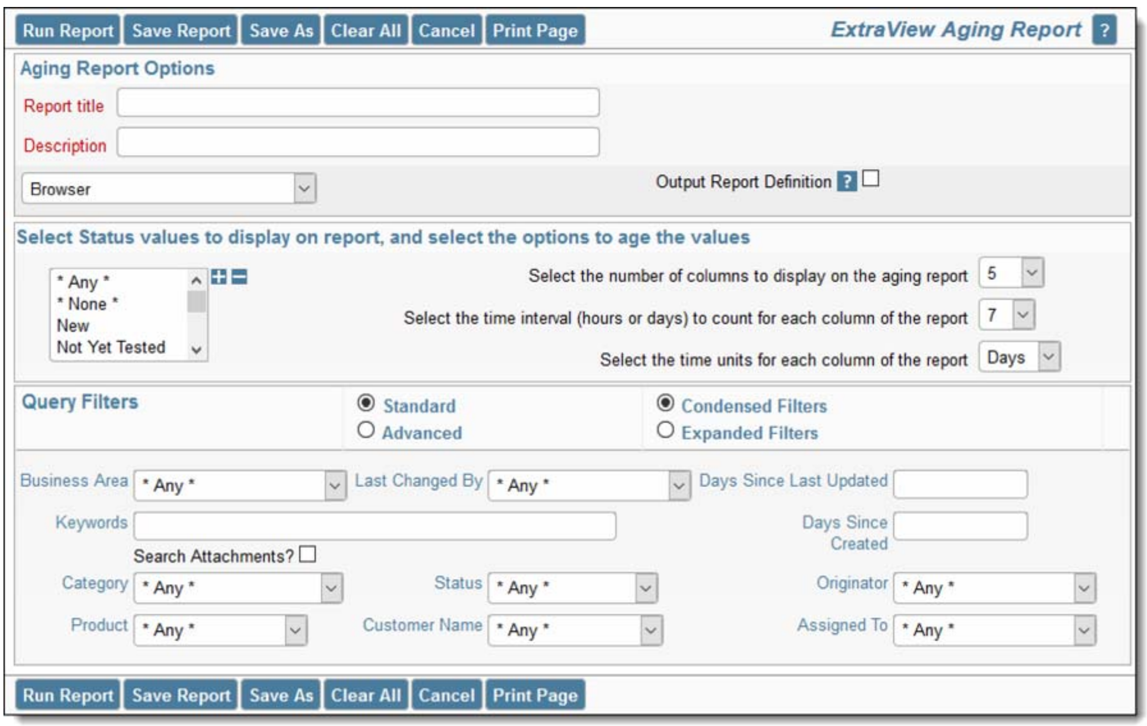
To prepare and run a matrix report that groups on multiple levels of hierarchical filters, perform the following steps:

- Create a new matrix report
- Select Condensed Query Filters
- Select Advanced Query Screen
- Select the report hierarchy titled *Tests*
- Select **Assigned To** as a field to display and group by. You group by this field by right-clicking on the red button by the field and selecting *Test Plan -->Test Case* as the hierarchy level
- Beneath the field list for the X axis, you see the *Perform count on* select list. Again, select the *Test Plan --> Test Case* entry. The important point is that this is the same hierarchy level that you chose in the last step

- Choose the base level query filters. E.g. select the filter **PROJECT = Test Plans** for the base level
- For the *Test Plan --> Test Case* level of the hierarchical filters, select the filter **PROJECT = Test Cases**
- For the *Test Case --> Test Result* level of the hierarchical filters, select the filter **PROJECT = Test Results**
- Run the report.

Aging Reports

If you choose the **Create new aging report** from the Query / Reports screen offers a variety of aging reports, designed to show how long issues have remained in various statuses as the issues were progressed from stage to stage. The aging report produces a count of issues that have been in each status for a defined period of time. These reports are offered at multiple levels as discussed below. When you select this option, you will see the following screen:



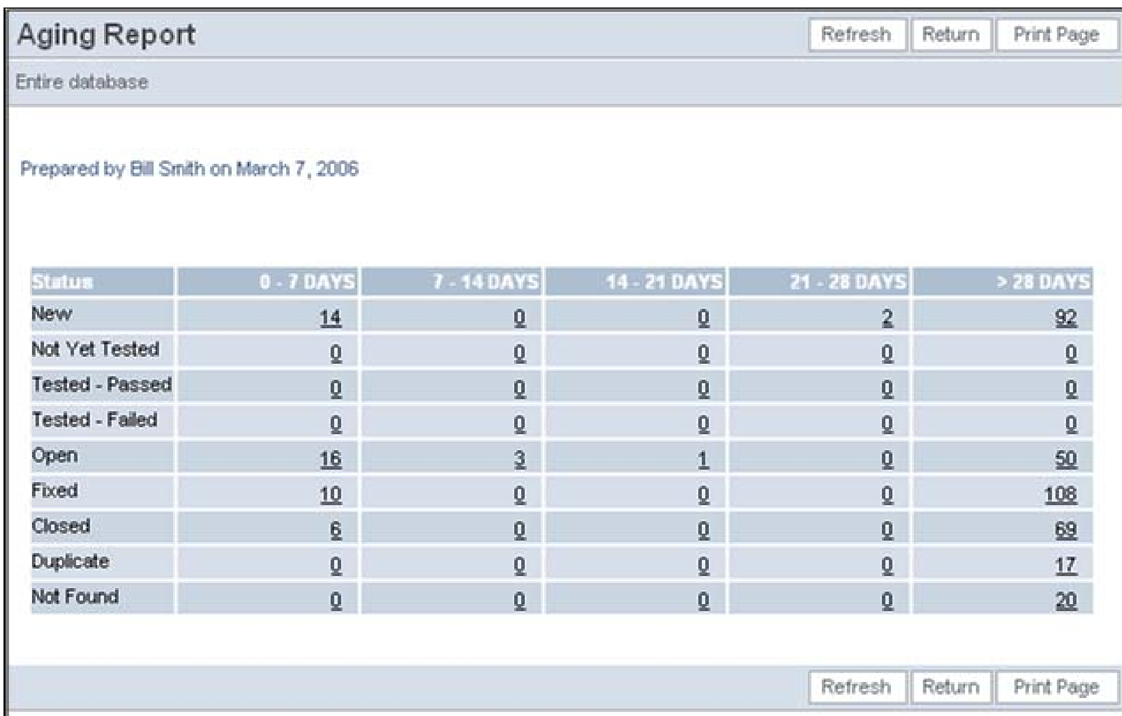
Creating an aging report

The Aging Report options are the same as for Column and Summary reports. Likewise, selecting filters is the same as for other report types. The specific information required for aging reports is collected in the center section of the screen.

Status List	This presents all the statuses available, and you may select the statuses you want to display on the aging report, when you run the report

Select the number of columns to display on the aging report	This option allows you to decide how many columns you want to display on your aging report. The default is five columns, but you can choose any number from one to one hundred
Select the time interval (hours or days) to count for each column of the report	This sets how long each period of the aging report is. For example, if you select the default value (seven) you are choosing either seven hours or seven days for the aging period, as further defined by the next option. The maximum for this selection is thirty-one, allowing for a breakdown by days over one complete month
Select the time units for each column of the report	In conjunction with the time interval, this selects whether you are aging the information in either hours or days. The default value of days, used with the other default options, results in an aging report with five columns, each representing one week in time

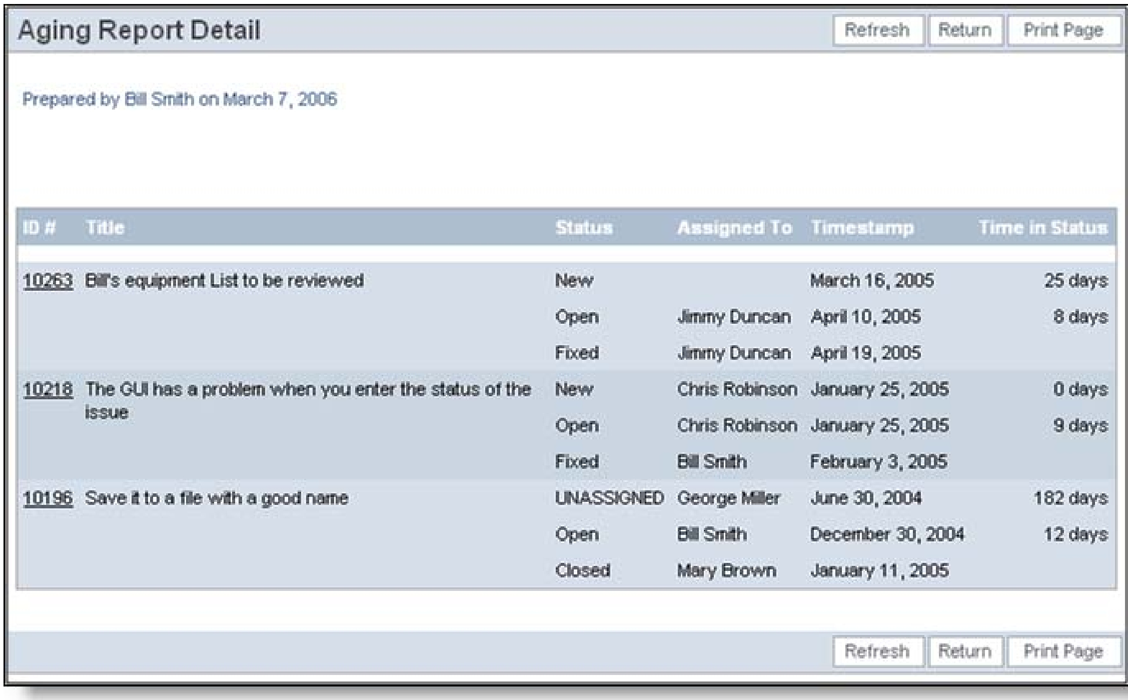
There is a button to the right of the **Report Title** that appears when you are editing an existing report. When you place your mouse over this button, you will see who created the report, who last updated the report and the dates when these actions occured. This is most useful for managing public reports. When you have selected the options and pressed the button to run the report, the output will look similar to the following:



Status	0 - 7 DAYS	7 - 14 DAYS	14 - 21 DAYS	21 - 28 DAYS	> 28 DAYS
New	14	0	0	2	92
Not Yet Tested	0	0	0	0	0
Tested - Passed	0	0	0	0	0
Tested - Failed	0	0	0	0	0
Open	16	3	1	0	50
Fixed	10	0	0	0	108
Closed	6	0	0	0	69
Duplicate	0	0	0	0	17
Not Found	0	0	0	0	20

Aging report display

As you can see from the sample, the report displays each of the statuses selected, along with a count of the number of issues that have been in that status for the different time intervals on the report. Each of the counts is a link to the issues that make up the count. Clicking on the number drills down to a further report that gives a history of the time the individual issues spent in each status as shown in the following diagram. Note that incomplete days are not counted in the aging. Similarly, if your report is based on an hourly drilldown, then incomplete hours are not counted.



Aging Report Detail

Refresh | Return | Print Page

Prepared by Bill Smith on March 7, 2006

ID #	Title	Status	Assigned To	Timestamp	Time in Status
10263	Bill's equipment List to be reviewed	New		March 16, 2005	25 days
		Open	Jimmy Duncan	April 10, 2005	8 days
		Fixed	Jimmy Duncan	April 19, 2005	
10218	The GUI has a problem when you enter the status of the issue	New	Chris Robinson	January 25, 2005	0 days
		Open	Chris Robinson	January 25, 2005	9 days
		Fixed	Bill Smith	February 3, 2005	
10196	Save it to a file with a good name	UNASSIGNED	George Miller	June 30, 2004	182 days
		Open	Bill Smith	December 30, 2004	12 days
		Closed	Mary Brown	January 11, 2005	

Refresh | Return | Print Page

Drilling down into an aging report

From this report, you can drill down again, by clicking on the issue ID #. This results in the Detailed Report for the issue being displayed.

Calendar Reports

Calendar reports are named as their output is presented in a traditional calendar format. All calendar reports rely on choosing a date on which an event happens. The date may be, for example, the due date of an activity or task, or may be a date such as the date a group of issues were created.

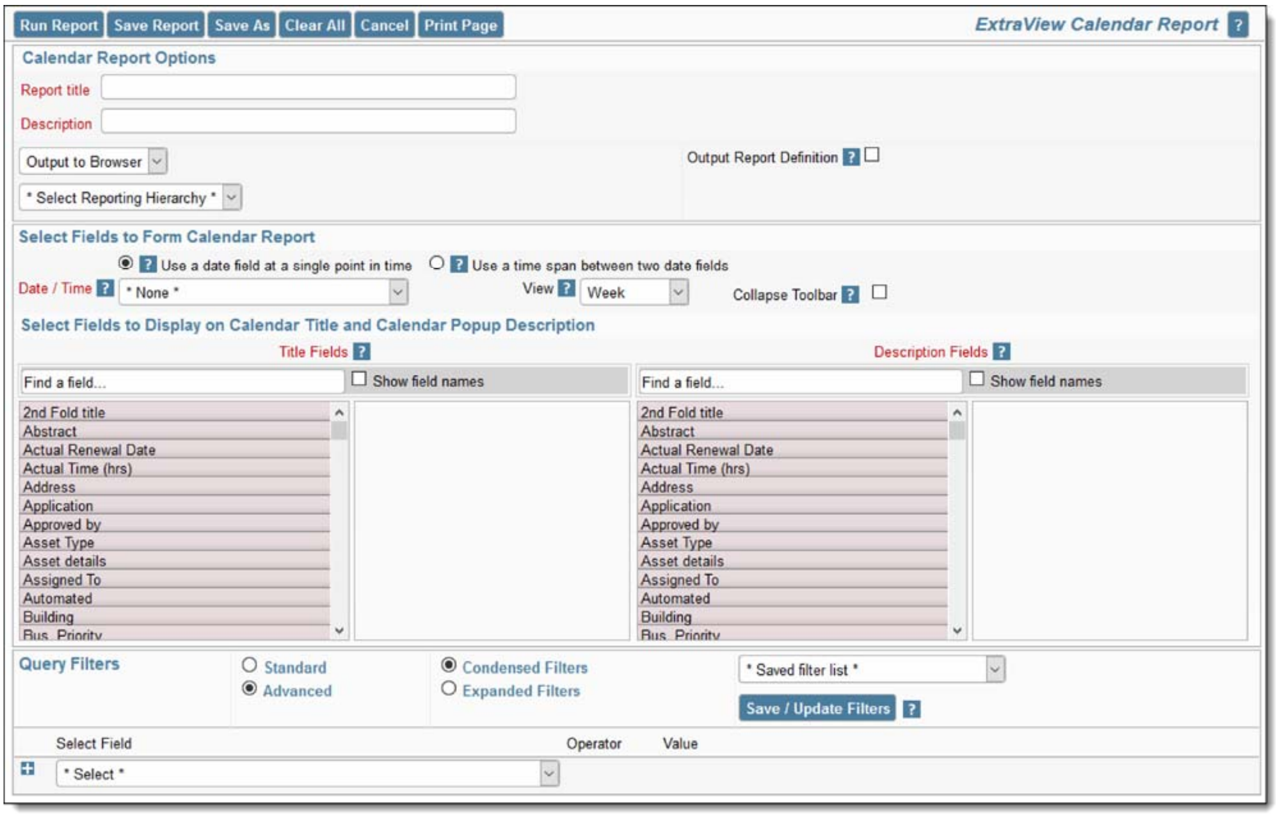
When there is an activity or event displayed on a calendar report, you will see metadata associated with the event on the report, and additional information when you hold your mouse over the event. Double-clicking on the event will pop up an *Edit* window for the event. Double-clicking on an empty spot on the calendar will allow you to create a new event (or issue). Assuming you have permission to alter the date that is being displayed on a report, then you can drag the event to a new place on the calendar. Doing so automatically updates the underlying issue. You may take an existing event and create recurrences of the event. For example, you might have an inspection that is due each Tuesday morning at 10:00 a.m. You create the first inspection event, then use the recurrence to create additional events at the same time on each successive week. Any one issue or event may be set up to recur a maximum of 366 times.

Once displayed, the calendar report contains many views - daily, weekly, the work week, monthly and an agenda view. Of special interest is that you may overlay many calendar reports on top of each other. This allows you to create many filtered views of events using different dates within your system, or events with different filters. These can then all be displayed on the one calendar report screen, using color to differentiate between the different sets of results. It is simple to navigate to different dates and date ranges.

A key point is to recognize how dates with a field display type of **date** and **day** are treated. **Date** type fields are placed on the calendar output at the precise time during the day that they occur. **Day** type fields have no time component and they are always placed at the top of the calendar report, at midnight of the day on which the event occurs.

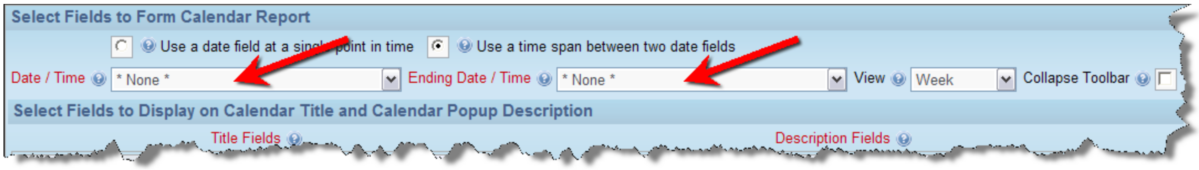
Creating a Calendar Report

From the Query screen, choose the **Create new calendar report** option. You will see this screen:



Calendar Editor

- The **Report title** and the **Description** are required before you can save the report you create.
- Calendar reports may only be output to the browser. They cannot be output to other destinations such as Microsoft Office documents or to Adobe Acrobat PDF formats
- Items displayed on Calendar reports are based on either a single date field or on two fields. If you select the option **Use a date field at a single point in time** then the calendar will display items at the date and time of the value of the field you select. If you select to **Use a time span between two date fields** then there will be two date fields used where you enter the starting date and time of the event in the first field and the ending date and time of the event in the second date field. Only date fields will appear in the lists offered. If the field you select has a display type of *day* then it does not have a time component, and the event will be displayed at midnight of the value of the event. If the field you select has a display type of *date* then the event is displayed at the time during the day of the event. Note that items created at a single point in time are actually displayed as one hour-long events. This is simply for display purposes. This has one effect that is worth noting. If an item at a point in time is created closer than one hour to midnight, then the event will only appear in the same day. It will not appear into the next day.

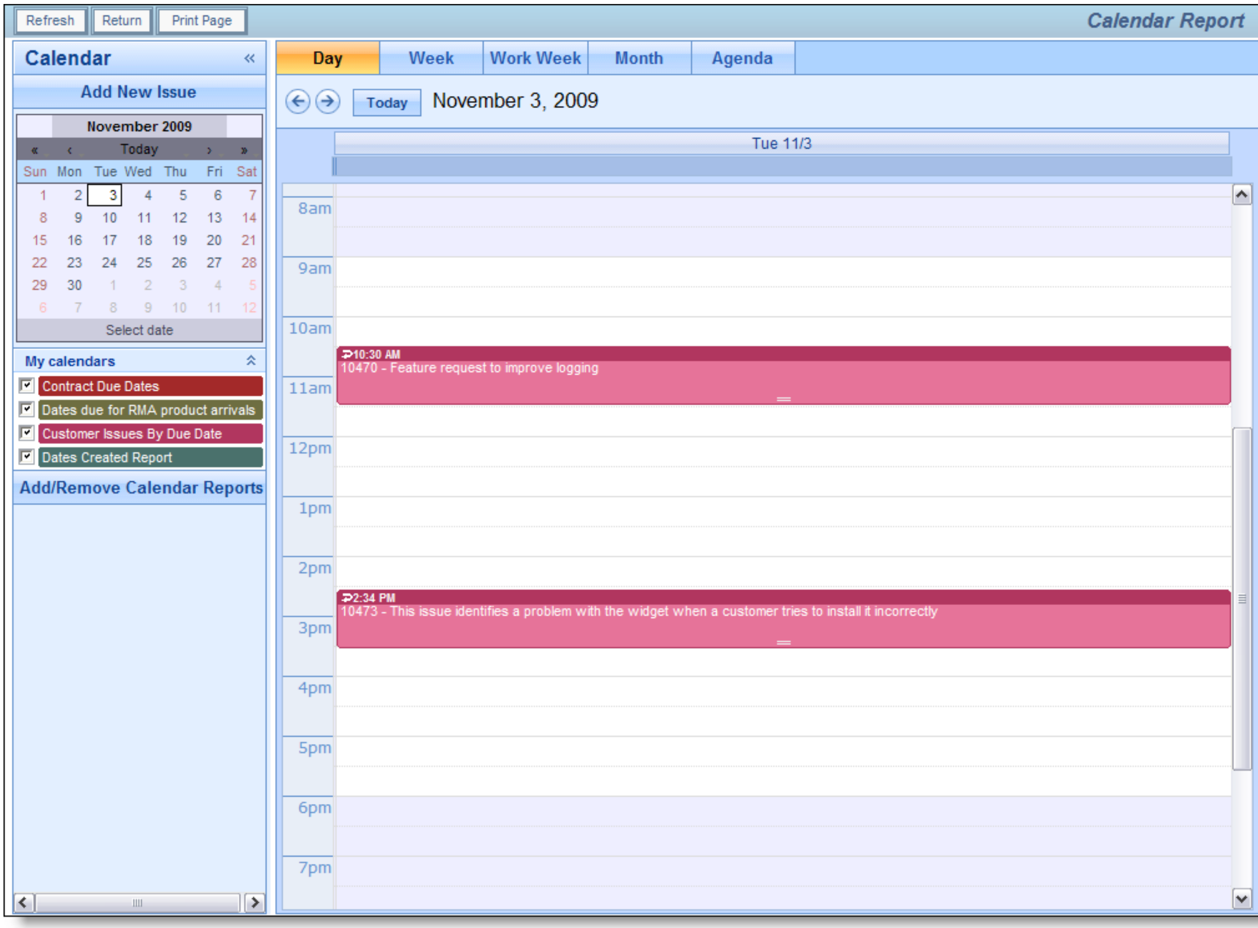


Choosing dates for calendar reports

- The **View** option allows you to initialize the calendar report in either a daily, weekly, work week, monthly or agenda view
- If you check the box to **Collapse Toolbar** then the toolbar on the output is not displayed when the report is first created
- The **Title Fields** are going to be displayed on the calendar, at the top of the event. It is recommended that you select the ID and Title of the item to be displayed
- The **Description Fields** are those that will appear in a window that pops up on the report output when you hover your mouse over an item. You may place any fields here, but it is recommended not to choose more than a handful of fields
- There is a button to the right of the **Report Title** that appears when you are editing an existing report. When you place your mouse over this button, you will see who created the report, who last updated the report and the dates when these actions occured. This is most useful for managing public reports.

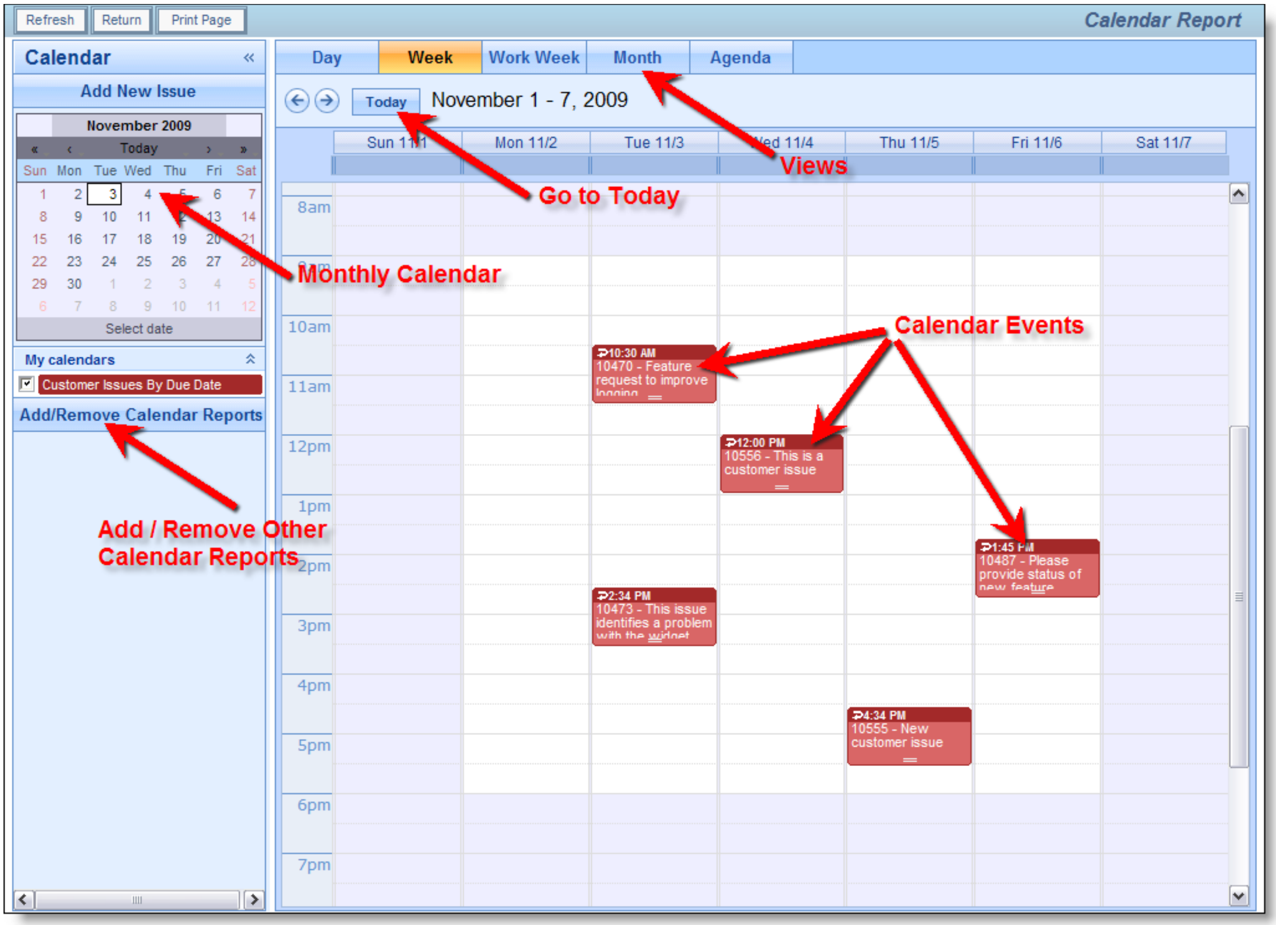
Viewing the Output

Click on the **Day** button to see the daily view.



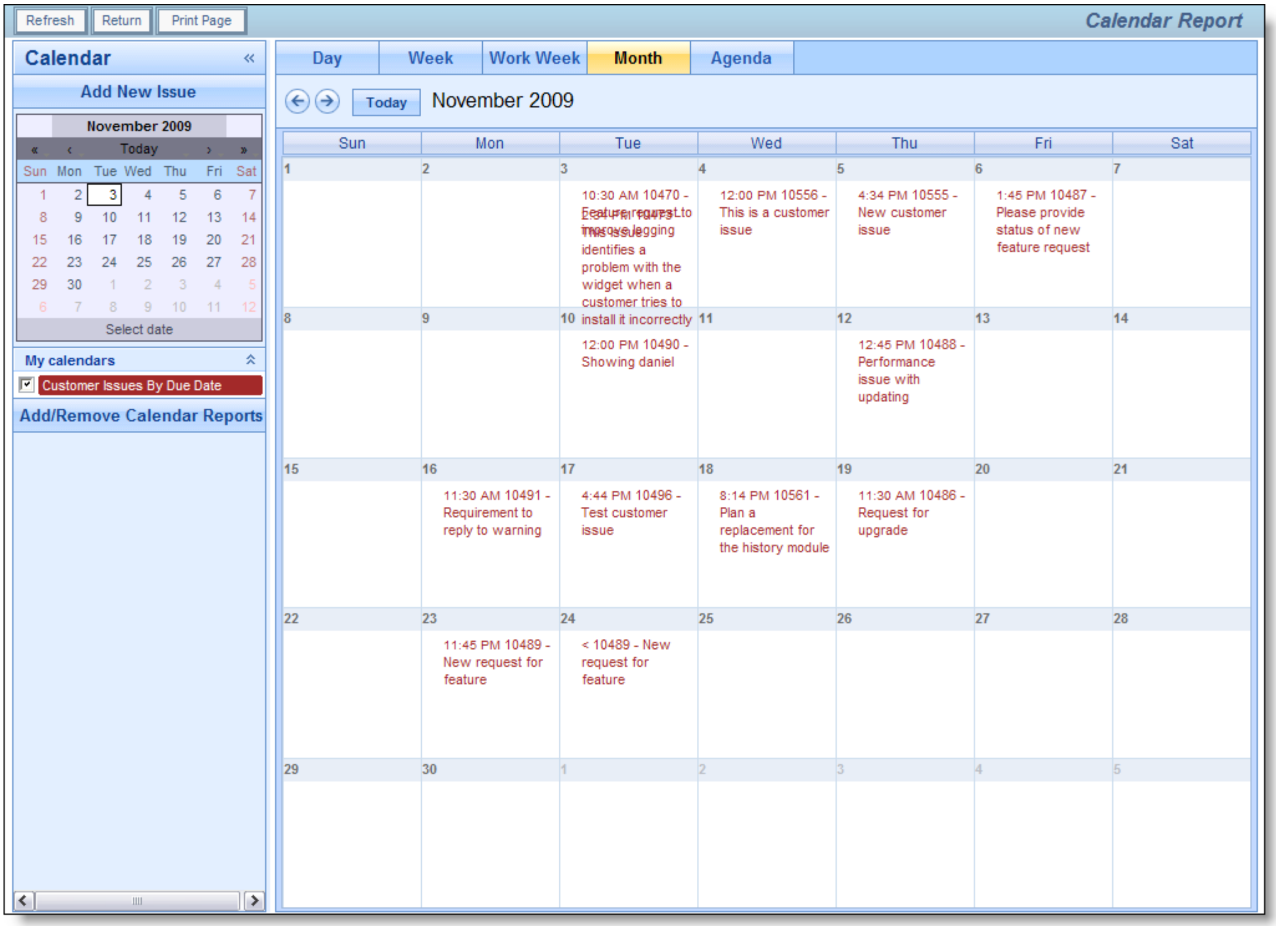
Calendar Daily View

Click on the **Week** button to see the weekly view. Note there is also a **Work Week** view which will only display Monday through Friday.



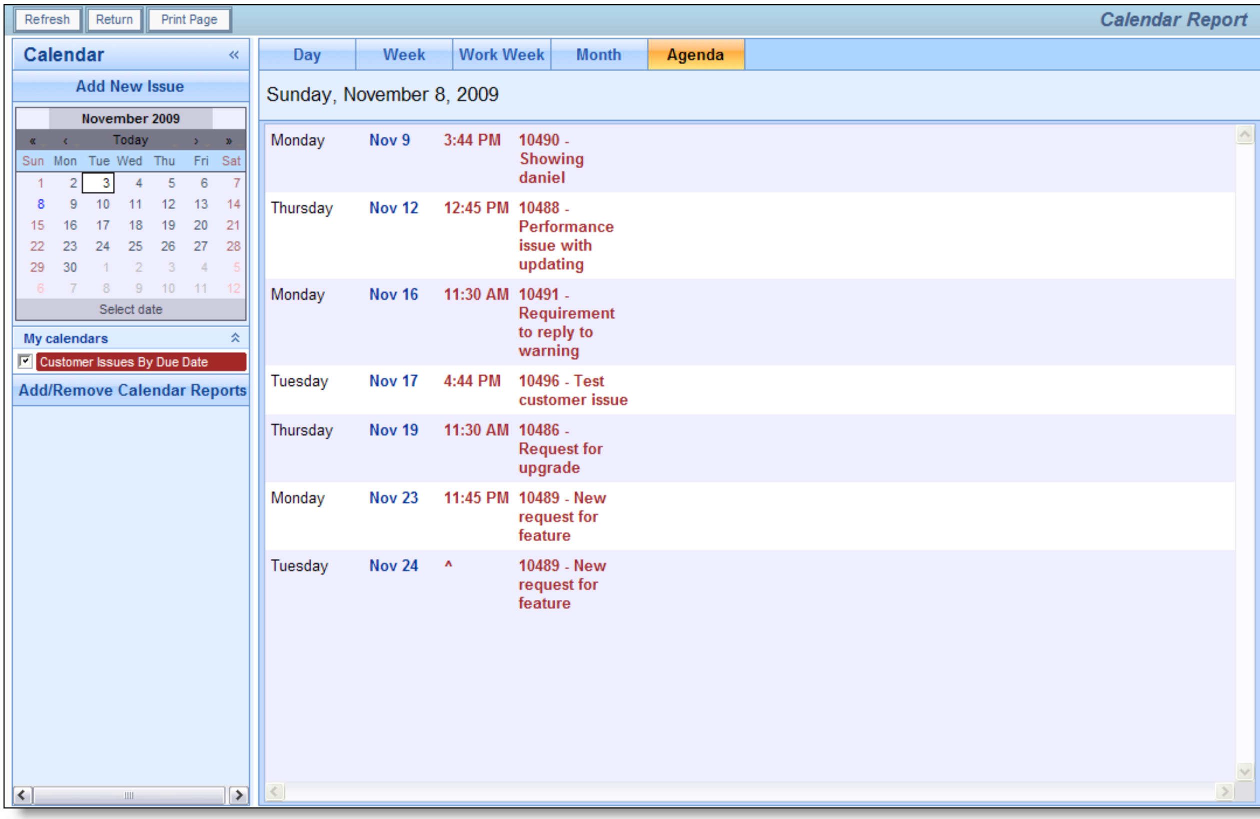
Calendar Weekly View

Click on the **Month** button to see the monthly view.



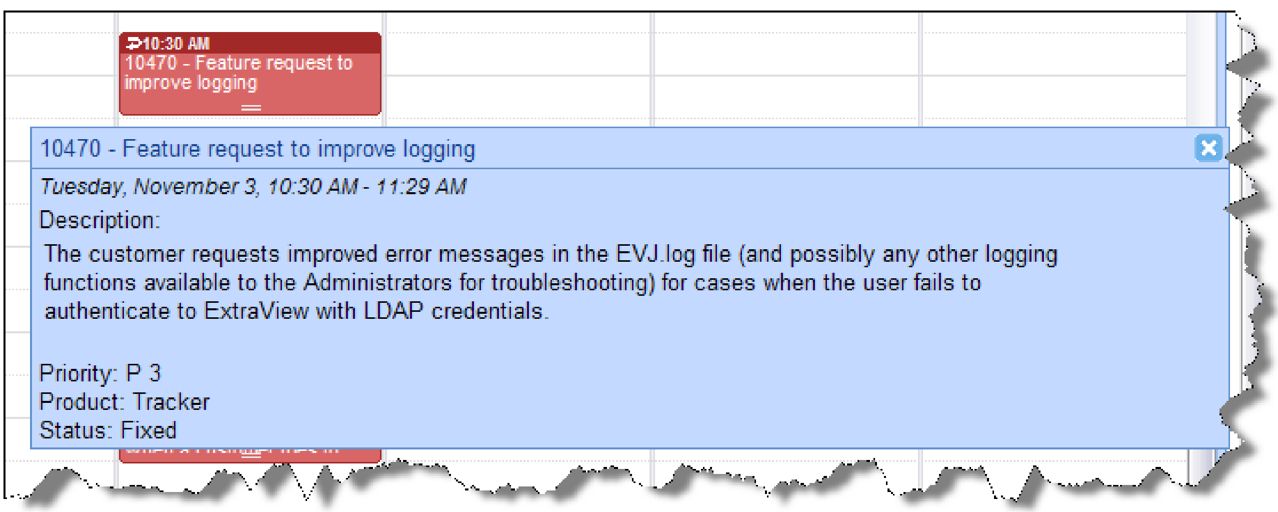
Calendar Monthly View

Click on the **Agenda** button to see the agenda view. This displays all the results in time-sequence.



Calendar Agenda View

If you place your mouse over an event on the calendar, a popup appears displaying the fields selected in both the title and description field lists in the report editor.



Calendar Popup

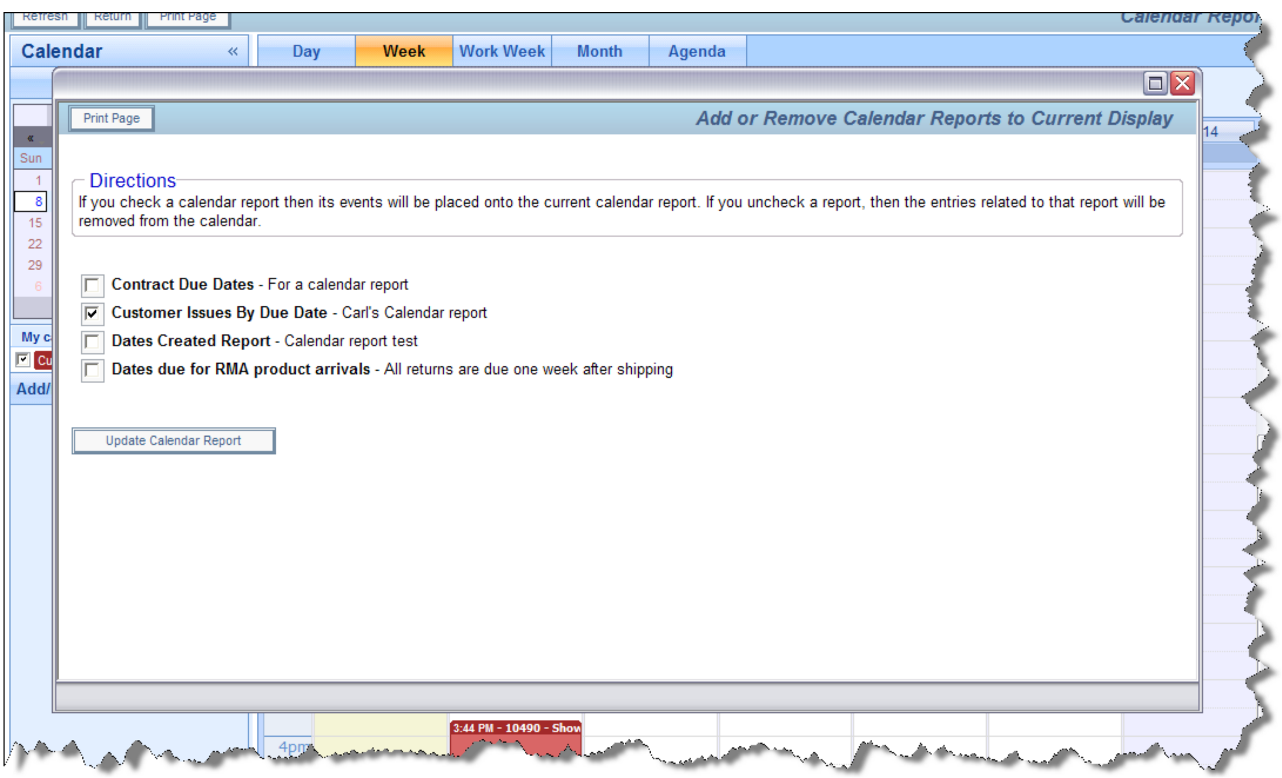
Manipulating Issues on the Calendar Output

You can both update events directly on the calendar report as well as add new events. In addition you can alter the time or duration of the event by dragging it to a new location on the calendar.

- Adding an event: Double-click on the background of the calendar and an *add* screen will open, allowing you to add a new issue (event) to the database. The *add* screen that appears will be that of your current Business Area and Project. Note that no verification screen appears after adding a new issue via the Calendar report
- Updating an event: Double-click on an event on the calendar, and you will open up the event (issue) in an *edit* window. Make any changes to the underlying issue and then update the issue in the normal way
- Moving an event: Click on an event and drag it with your mouse to a new location on the calendar. The date field upon which the event is based is updated when you drop the event at its new date and time. Note that if the field is read-only, or is one of ExtraView's built in fields (such as the *Date Created* or the *Date Last Updated* then you will not have permission to drag-and-drop the event to a new date and time
- Extending the duration of an event: This is only applicable to events that cover a time span, i.e. they have a beginning start date and time and an ending date and time. You may move the event, in the same fashion as the previous bullet, or you can extend or reduce the duration of the event by using the anchor point at the bottom of the event. You can click on this and drag the end point of the event to the new date and time.

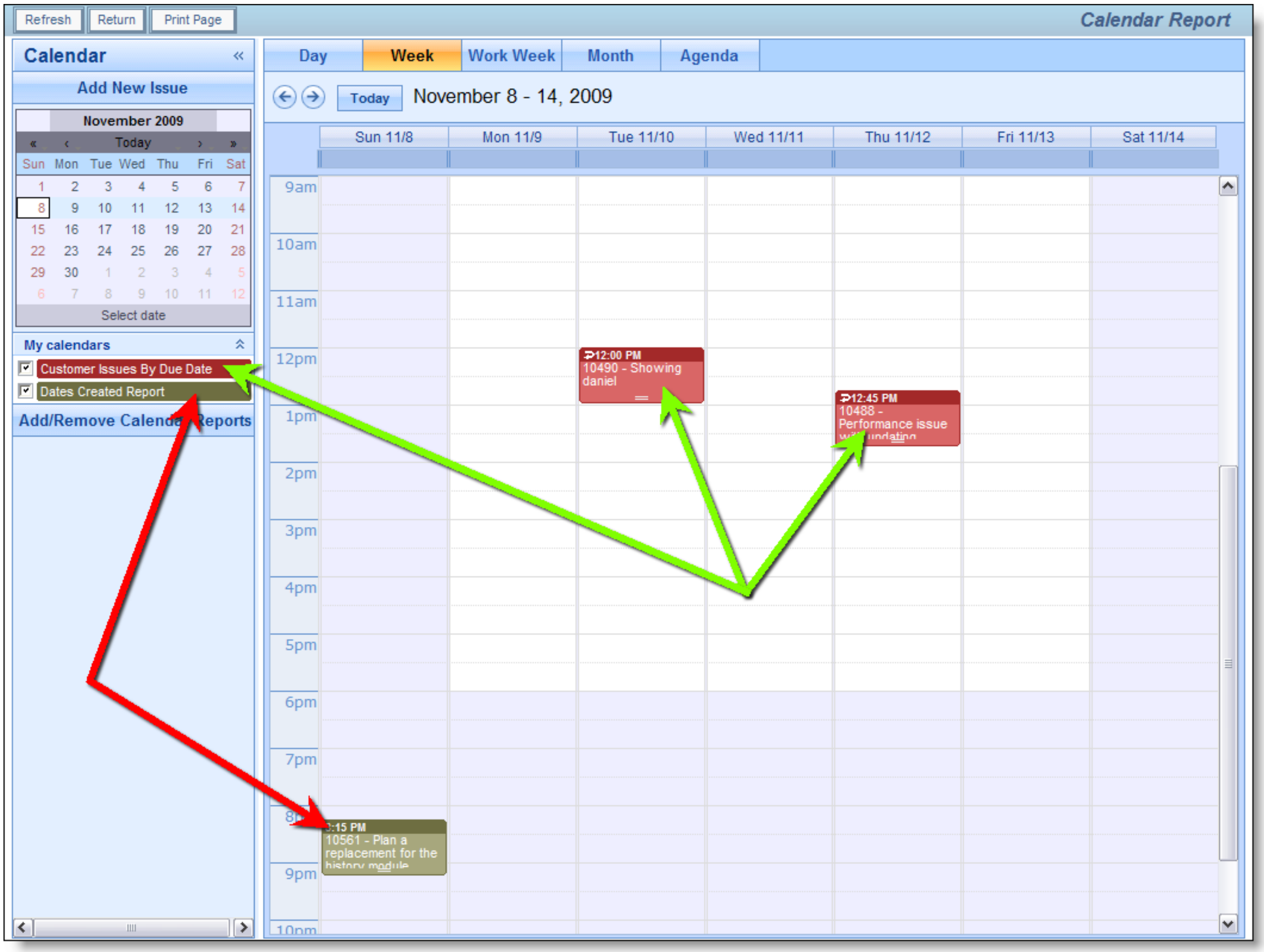
Adding Additional Calendar Reports to the Current Report

A useful attribute of the calendar is the ability to many calendar reports onto the same report output. The results of each additional query after is selected via the **Add/Remove Calendar Reports** button after displaying the first calendar. When you press the button, you will see a screen similar to:



Adding Additional Calendars to the Report

Simply check the reports you want to add into the existing report output. Up to 24 calendars can be added into the one report. This image shows two calendar reports displayed together:

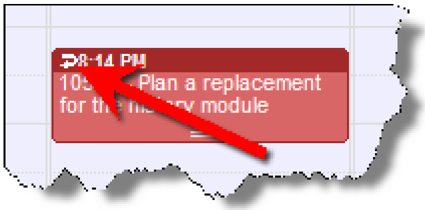


Multiple Calendars on a Single Report

If any of the calendar reports that have been added to the output have runtime filters, then an icon appears beside the report title at the left-hand side of the screen. Clicking this icon allows the runtime filters for the report to be altered.

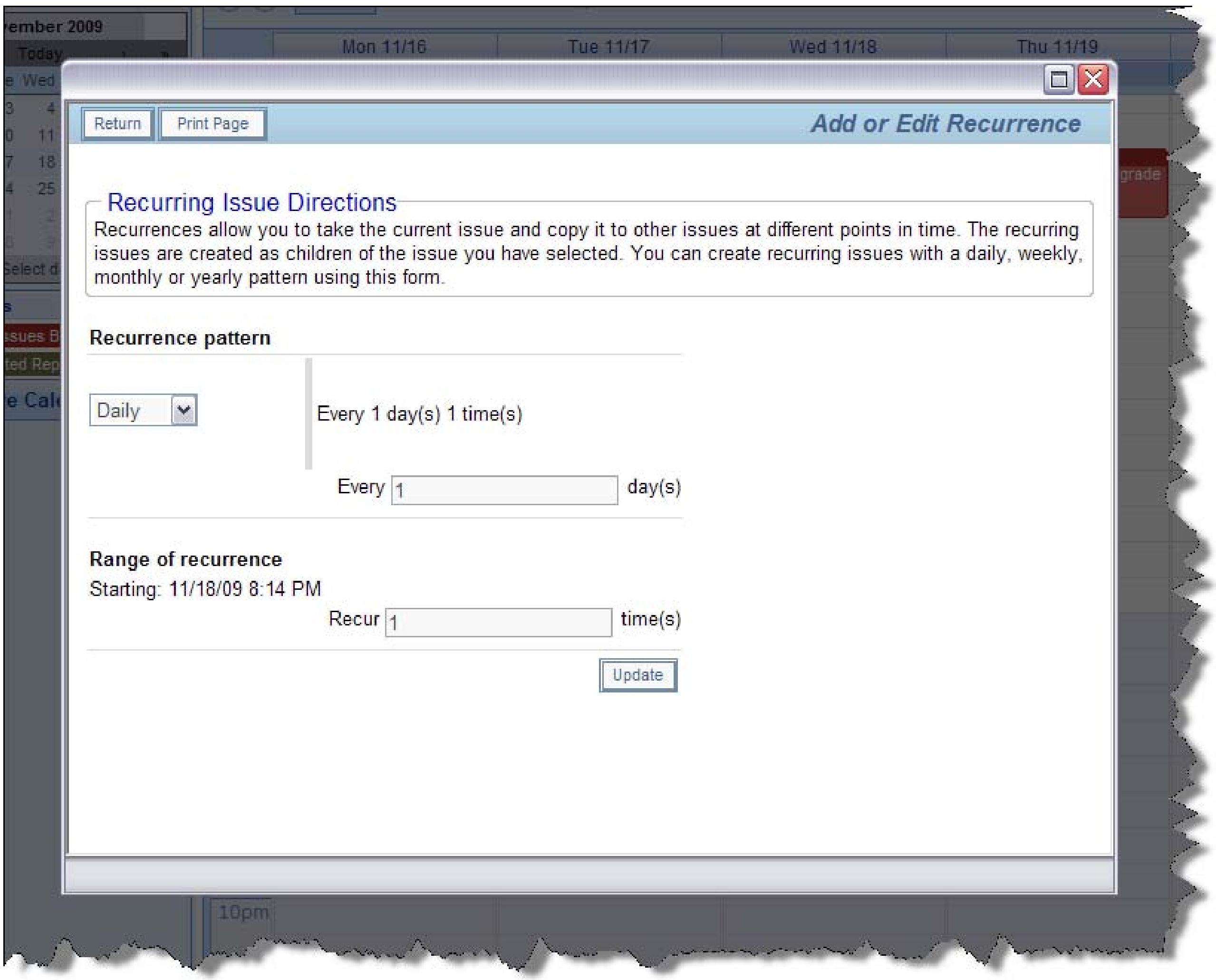
Recurring Events

Recurring events may be created from any calendar event where there is write permission to the date field(s) upon which the report is based. For example, you cannot create a recurrence on a report based on the **date created** field as this is system maintained, but you may create a recurrence from a calendar report that is based on a user defined field to which the user has write permission. The ability to create a recurrence is indicated by a small arrow at the top left-hand corner of the calendar event as shown here:



Click here to enter the recurrence for an issue

When you click on the arrow, a window dialog box pops up, allowing you to create various types of recurrence:

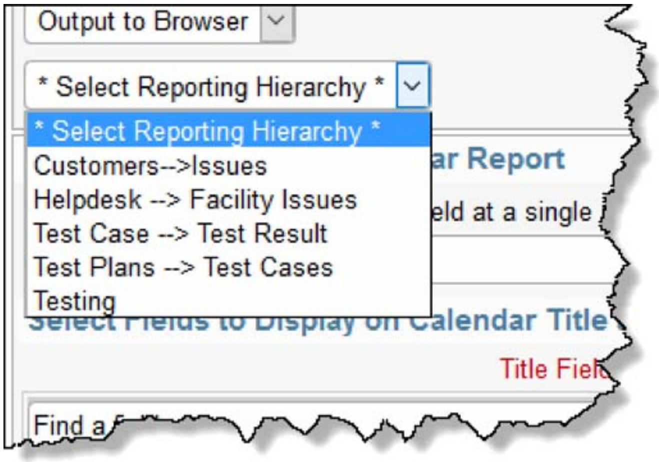


Creating a recurrence for an issue

Issues can be made to recur on a daily, weekly, monthly or yearly basis. For any choice of the period, the popup dialog box alters to allow you to set up the recurrence. For each recurrence, a new issue is cloned from the original at the appropriate day and time. You can set up any issue to recur a maximum of 366 times. Once the issues have been created, they work independently when a user updates each issue, although you can alter the recurrence, or sever an issue from the recurrence.

Hierarchical Calendar Reports

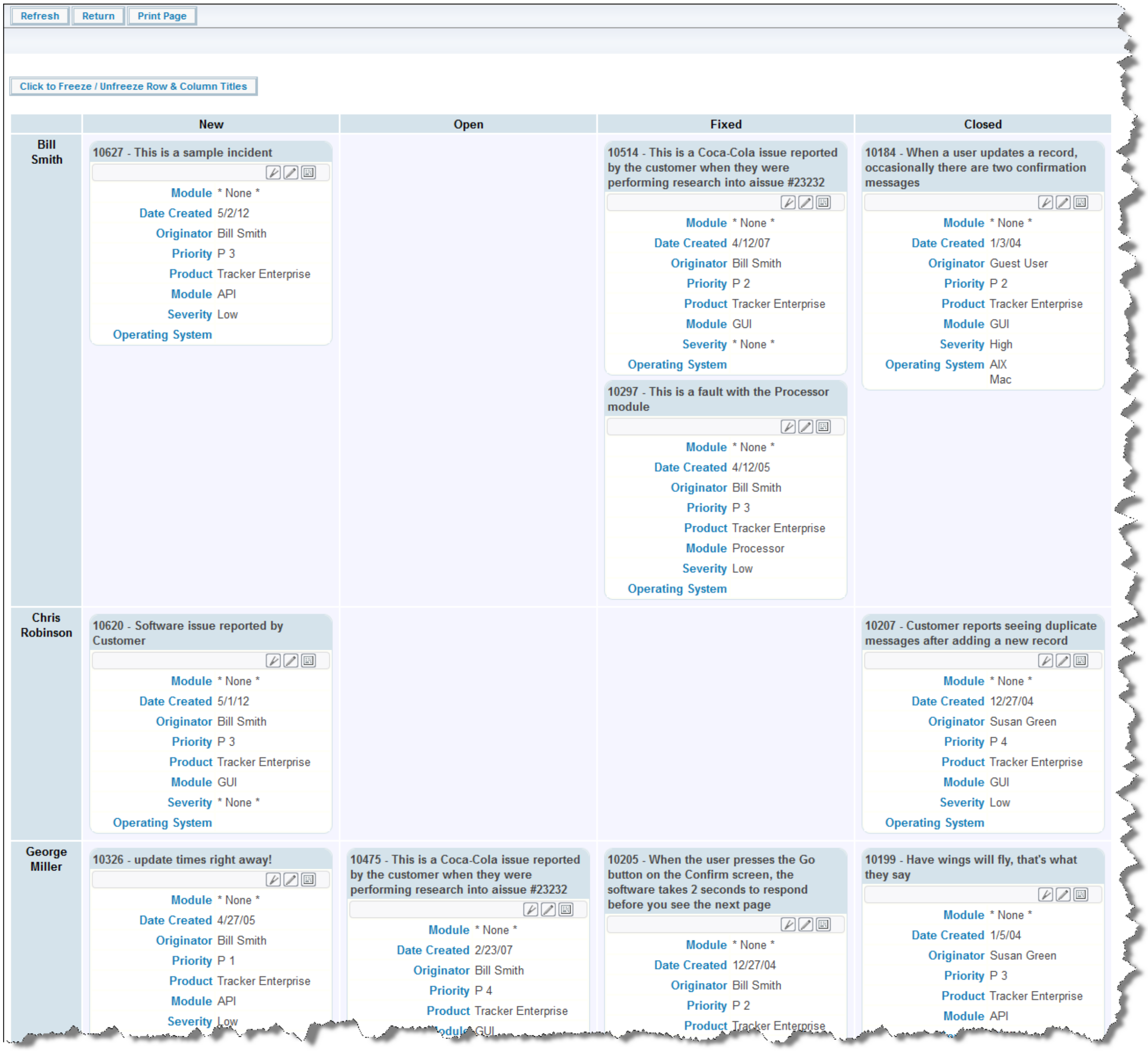
If your administrator has defined hierarchies on which you can report, you will see an additional prompt on the report editor screen:



Reporting on hierarchies within calendar reports is similar to the way they are defined for column reports (See the section on Column reports for a full explanation). The key difference is that you are only required to select the filters for each level in the hierarchy. These filters will be applied to each level of the hierarchy for the preparation of the data to be placed on the report. The report output will look very similar to a standard summary report, except that the additional filters are applied.

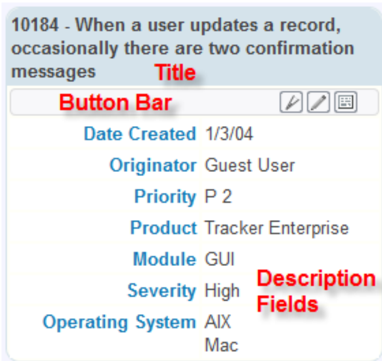
Taskboard Reports

Taskboard reports are designed to offer a matrix of issues on a display. The axes may be any enumerated list type field. For example, you might have **Assigned To** on one axis and **Status** on the other axis. Issues are displayed within tiles on the report output. You decide which fields are to be placed on the report, both in a title area, and within the description area of the tile. The key attribute of the taskboard report is that you can drag individual tiles from one location on the report, to a different area. Using the example above, this means you can drag an issue with a specific **Assigned To** value and a specific **Status** value and drop it on another area of the report, thereby updating either the **Assigned To** or **Status** value, or both values at one time.



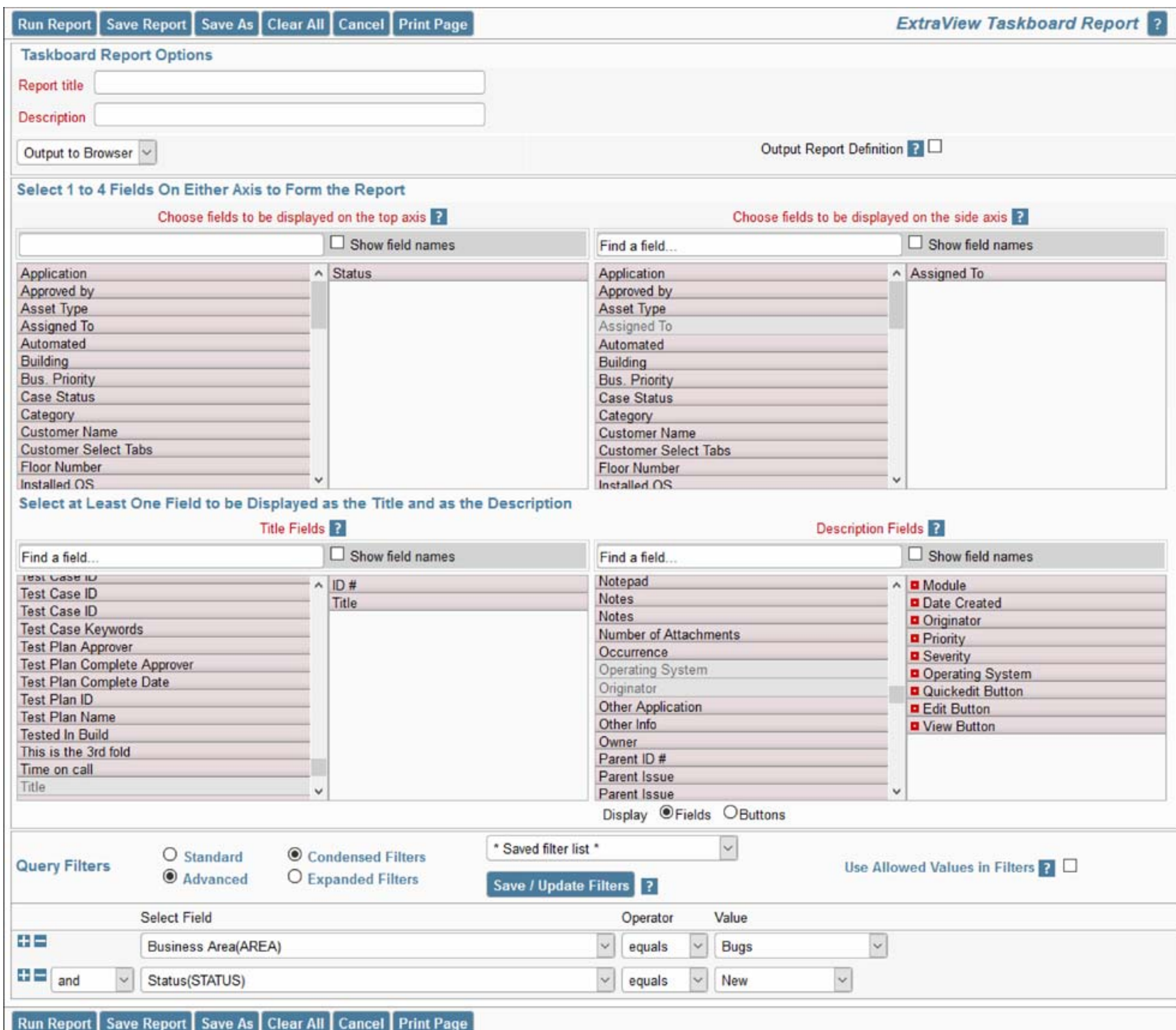
Taskboard Report Output

With the above screenshot, you can use your computer's mouse to drag the issue represented by the tile in the top left-hand corner of the report and drop it elsewhere. This issue has values of *Bill Smith* for the **Assigned To** and *New* for the **Status** field. When you drop the issue in another row and column, the values for the **Assigned To** and **Status** are immediately updated to those of that row and column. If the update triggers additional rules, then a popup window appears, asking for values to satisfy these rules. For example, you might need to provide a **Comment** when you update an issue's **Status** from *Open* to *Fixed*, so the popup would ask you for a value for the **Comment** field.



Taskboard Tile

The Taskboard Report Editor



Taskboard Report Editor

- Provide a title for the report

- Provide a description for the report
- Note that the only valid output option is your browser
- Like all other report types, you may use Condensed or Expanded query filters
- Like all other report types, you may use the Standard or Advanced query mode
- You may select a reporting hierarchy for the filters. When you choose a hierarchy, you will see query filters for each level of the hierarchy
- Select from one to four fields to use to set the top axis of the report. The valid fields to choose from are all of the various list types within your installation. When you choose more than one field for the axis, you will see the tiles will appear on the report output within new sections that are created within each field. Note that multi-valued list fields may not be placed on axes
- Select from one to four fields to use to set the side axis of the report. The valid fields to choose from are all of the various list types within your installation. When you choose more than one field for the axis, you will see the tiles will appear on the report output within new sections that are created within each field
- Choose the fields to display within the title of each tile. Typically you will only choose one or two fields such as the issue ID and the Title of the issue
- Choose the description fields to place within the body of each tile on the report output. Note that you may also choose various buttons to place on the output. All the buttons you select are gathered together and placed in a mini-button bar under the title of each report tile
- Choose the filters for your data. It is possible to create a vast number of cells on your report output if you do not provide reasonable filters for the data. Your administrator will have set some limits as to how many tiles you can place on a report. Obviously, a report that has tens of thousands of tiles becomes unworkable and virtually impossible to navigate
- In the usual way, run or save your report

Editing Fields on a Taskboard Tile

There are several ways in which you can alter values within a Taskboard tile. In order to be able to edit an issue, you must have permission, and in order to be able to edit a field within an issue, you must have permission to write to that field:

- Drag the tile and drop it within a different row and column of the report. This will update the values within the issue to those that appear on the title of the row and column
- Double-click on a field within the description area of a tile. This allows you to update a single value within the field on the tile. Note that if this field is also a field on one of the axes of the report, then the tile will be moved to the appropriate row and column of the report. If you use double-click to initialize the edit operation, you use the enter key within a text field to complete the edit. With a list field you simply select the new value. If you want to cancel your edit, then use the **Escape** key on your keyboard. The report will not allow you to edit values that are read-only, or fields to which you do not have write permission
- Use the Quickedit button to allow the editing of all the fields on the tile at one time. You will also see an **Update** and **Cancel** button appear within the button bar as controls. Note that you cannot use Quickedit on more than one tile at a time
- Use the Edit button on the button bar to enable a popup window with the entire record available for editing and updating.

Planning Reports

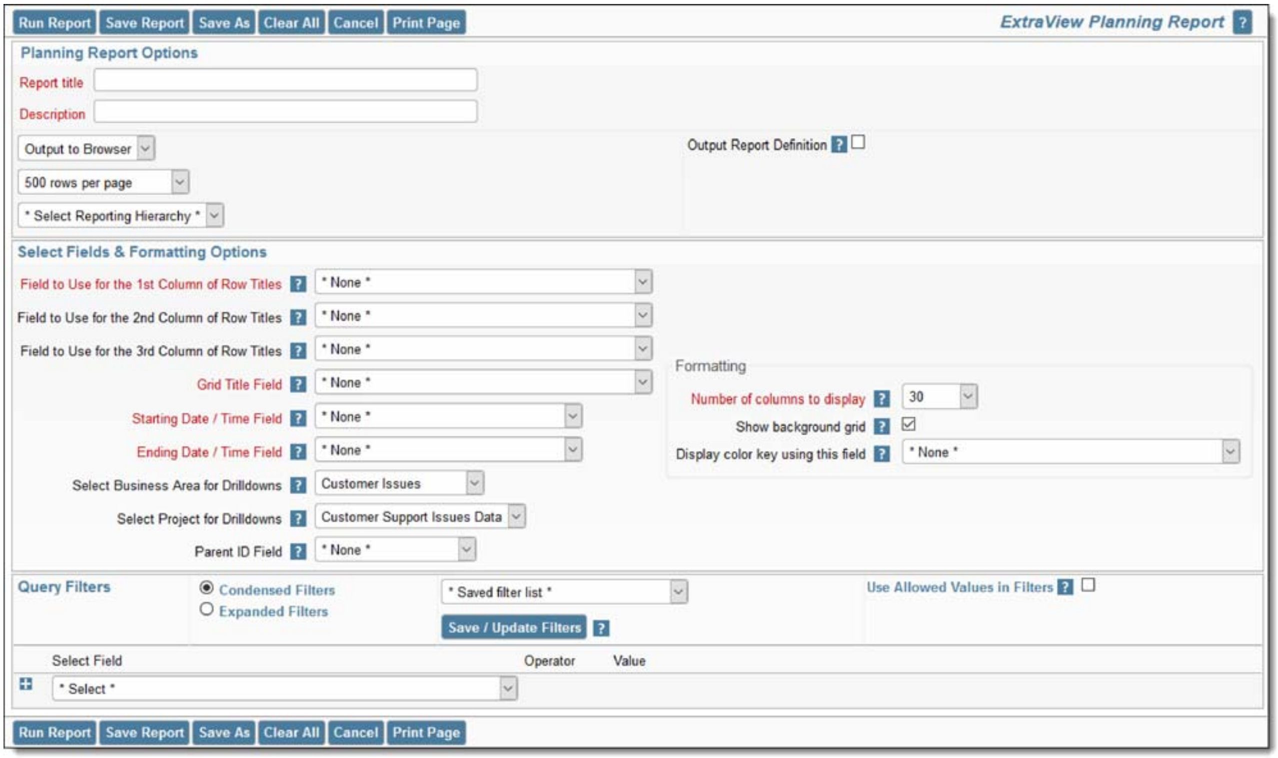
Planning reports will not work with all configurations, and require your data to be organized in a specific way. Your administrator may have turned off this feature if it's not appropriate.

The basic premise is that you have a controlling issue (i.e. a parent issues). This controlling issue will be in a relationship with a number of child issues, where each of the child issues has two date fields, signifying a start and an end time for an event. The use case is often that you have a project, and this project has an open-ended number of tasks, each scheduled to start and to stop at a specific time.

The Planning report allows the user to see many project records, and their tasks, all on a single report. The user can interact with the tasks on the report, allowing them to move the start or end dates of each task. The user can also drilldown into any task and update the fields on the task. This is shown in this screenshot:

Planning report output

The user interaction on the report allows the "grabbing" with the mouse, of a task, or the edge of a task. When the user moves the mouse, the entire event, or the start or end date will move. When the user releases the mouse button, the task is reset to the new time period. If the user clicks on a date within the grid and drags the mouse to another date, a window will popup, allowing the user to enter a new task for that time span. To set up a new planning report, the screen looks similar to this:



Planning report setup

- **Use reporting hierarchy** - You must choose a reporting hierarchy for a planning report. This will have been created by the administrator
- **Fields to Use for Row Titles** - These are the fields on the parent issue that you will use for the titles to each row on the output
- **Grid Title Field** - This field is used to provide the title that is displayed on each child issue
- **Starting Date / Time Field** - This is the field on the child record that contains the starting time of the event
- **Ending Date / Time Field** - This is the field on the child record that contains the ending time of the event
- **Select Area for Drilldowns** - When the user double clicks on a child record, this is the Business Area that is selected in which to start the add issue operation
- **Select Project for Drilldowns** - When the user double clicks on a child record, this is the Project that is selected in which to start the add issue operation
- **Parent ID Field** - This is the name of the field in the child record that contains the pointer to the parent issue
- **Number of columns to display** - The default is that the report will display 30 days worth of information. You may alter this to display between one and sixty days of information
- **Show background grid** - Turns the background grid to the report off and on
- **Display color key using this field** - As you can see in the above screenshot, there are two colors of blocks. These represent different values of the STATUS field inthe different child records. The color key is shown above the grid.

Charts

Selecting the **Create new chart** option from the Query / Report screen allows you to create charts of various types. Pie charts, bar charts, stacked bar, area charts and line charts can be built and displayed. Each chart you create may have filters that allow you to select what data is represented.

Note: The font used on the display of charts you prepare is set as a personal option. You can edit your personal options and choose the font you wish to use for the charts you prepare.

All charts are generated as of a specific point in time. For example, you can draw a pie chart of the status of issues within a product, as of one month ago, or you can draw a bar chart of open issues as they stood at the beginning of each month for the last year. These charts may have query filters set. For example, you may draw the chart for a specific product. The specific product used for the preparation of the chart will be the one currently stored within the issue. If this product changed within the history of the issue, the chart will not reflect this, and will report as if the issue always reported the same product. In most cases, this is sufficiently accurate, as fields outside of status that are used in the selection of filter criteria do not typically change often, if at all.

Care should be taken when selecting the filters to use for a chart, after selecting the field or fields which you are going to use for the chart itself. This matters if you choose the same field as a filter and for the chart. You might generate a chart that does not have the values you expect, by filtering out all the values.

Note: Depending on how your administrator has configured any field you select in the **Select field to chart** entry, may or may not be required when you are entering and updating issues. This is represented by the *** None *** value you see in the list. You may not want your charts to contain the *** None *** value. ExtraView will only place the *** None *** value on your chart if you explicitly include this in your list. If you choose the *** Any *** value, you will not see the *** None *** entry on your chart.

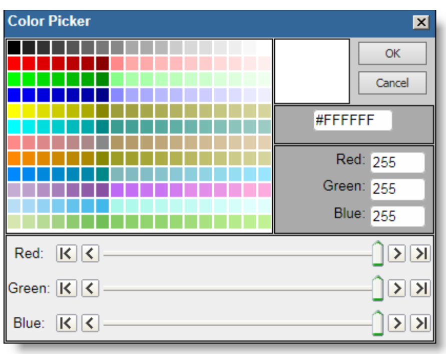
There is a button to the right of the Report Title that appears when you are editing an existing chart. When you place your mouse over this button, you will see who created the chart, who last updated the chart and the dates when these actions occured. This is most useful for managing public reports.

Common Chart Attributes and Filters

Most attributes are common across all chart types that you can create. However, some attributes do not appear on all report types as they have no context.

- Chart Attributes
    - You may choose a **reporting hierarchy**. If you do, you will be able to set report filters for each level of the hierarchy. Reporting on hierarchies within charts is similar to the way they are defined for column reports. The key difference is that you are only required to select the filters for each level in the hierarchy. These filters will be applied to each level of the hierarchy for the preparation of the data to be placed on the chart. The chart output will look very similar to the standard chart you are preparing, except that the additional filters are applied
    - There is an option to display the chart on **mobile** devices

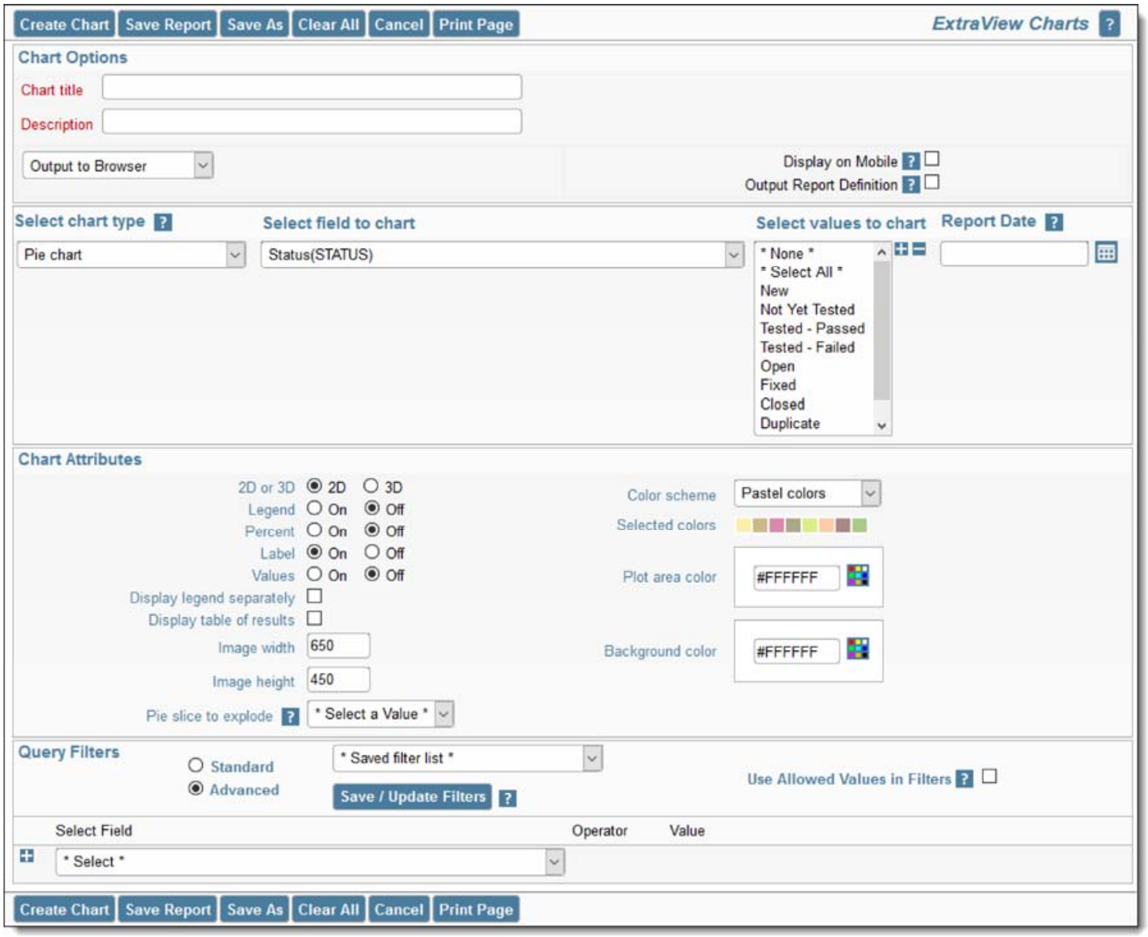
- There is an option to output the chart fields and filters **definition** along with the chart
- Choose the presentation options for the chart – **2D or 3D**, whether to display a legend, whether to show the percentages for each slice of the pie, whether to display the labels, and whether to display the values for each slice
- If you check the box **Display legend separately** then the legend for the chart will not be rendered within the chart, but will be rendered to the right of the chart, in a separate area. This is useful if you have very long labels on the chart, and they overflow the size of the chart area
- If you check the box **Display table of results**, a table with the numeric results will accompany the chart output. For each data point on the chart, you will see its value in a table on the same page as the report
- For many chart types you can add a **drilldown link**. When the user clicks on the segment of the chart, a Quicklist is prepared with the issues that formed the chart segment
- Also selectable is the overall **width** and **height** of the chart. You are limited to charts that are a minimum of 100 pixels in width and height and a maximum of 1,600 pixels in width and height
- For pie charts, you can **explode** a slice of the chart
- There is an option to display the **table of results** along with the chart
- You can select a **color scheme** for the chart or design your own by choosing the Custom option
- Alter the color of the plot area and the background color for the chart with the options provided. You can either type in a hexadecimal color value, or click on the color picker button to select a color from a palette



Color Picker

- Chart Filters
  - You should not set a field as a filter if you have selected the same field as the **Select field to chart**. Doing so will lead to incorrect results being displayed
  - Select the filters for the report. Like other report types, you can move between the standard query filters, and the advanced query filters, using the radio buttons at the top of the screen.

After choosing the pie chart option a typical report editor screen looks like this:



Charts with Repeating Rows

There is currently a restriction on multi-valued fields within charting. Only one of the values for a time interval will be reported.

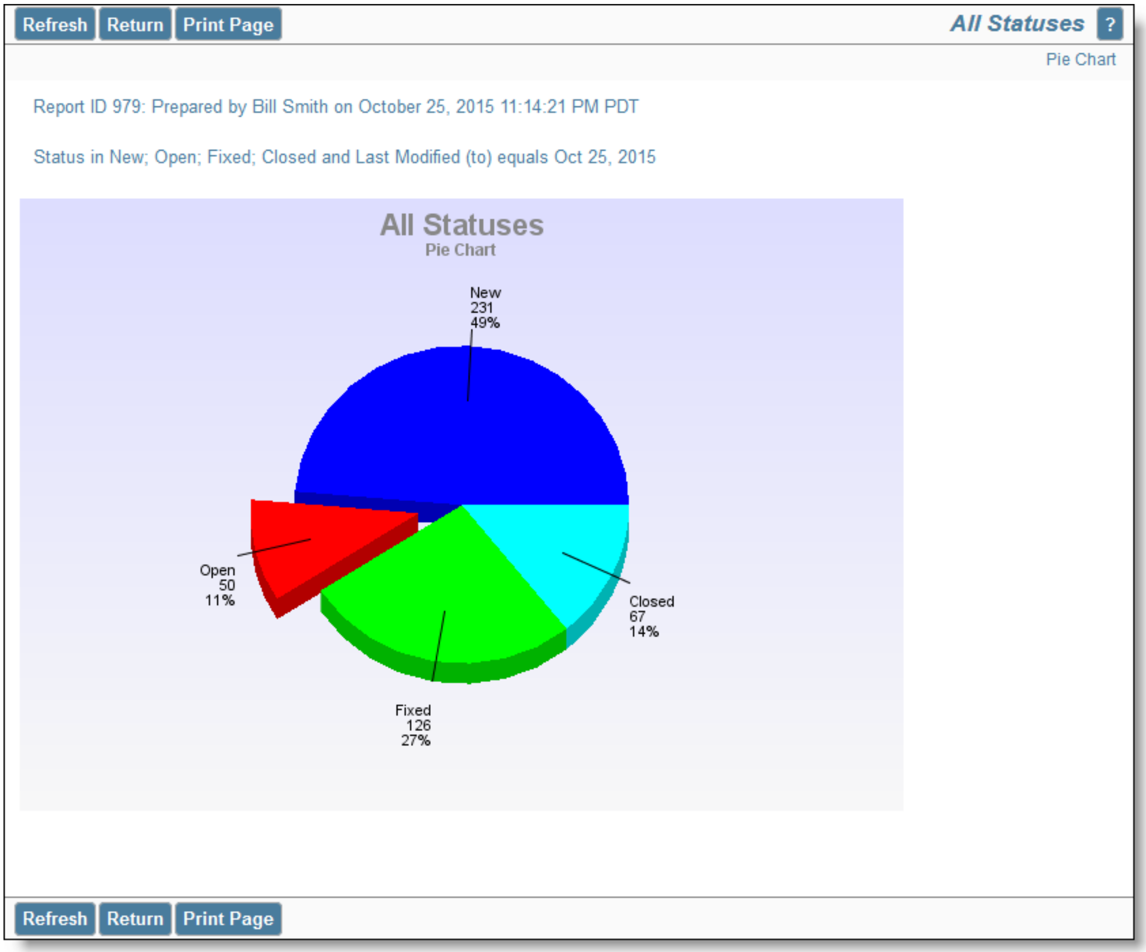
Pie Charts

Pie charts are all produced at a point in time, as specified by the date you select within the Report Date field.

You simply select the enumerated field you wish to place on the chart, and select the values within the field that you wish to place on the report.

One option for pie charts is to explode a slice of the pie. Select the value of the field you are plotting for this operation.

A sample pie chart is as follows:



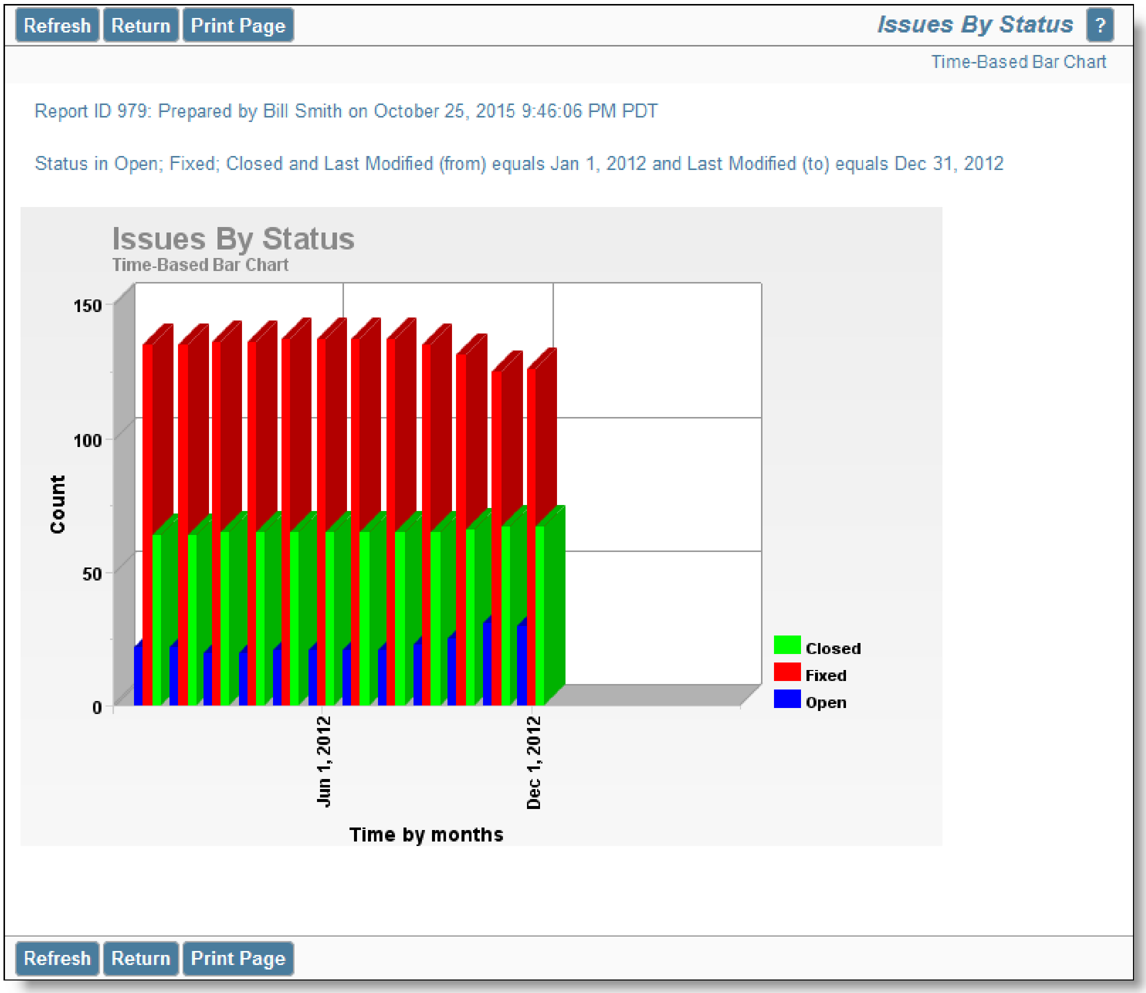
Bar Charts

Time-Based Bar Charts

Choose the **time-based bar chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select the field to chart. The list presents all the potential enumerated list fields which are eligible for the chart type
- From the field you select, you can choose one, multiple or all the values within the field
- Select the Start and End dates. Note you can choose $$SYSDAY$$ to represent the current day, and you can perform simple arithmetic on the date. For example, $$SYSDAY$$ - 30 represents 30 days ago
- Choose the increment for the X axis, from days, weeks months and years
- Cumulative results include every item that matched criteria during the time period you selected. If this box is not checked then only the items that first transitioned to match criteria in the given time period are used to calculate the values displayed on the chart.

A sample time-based bar chart looks like this:

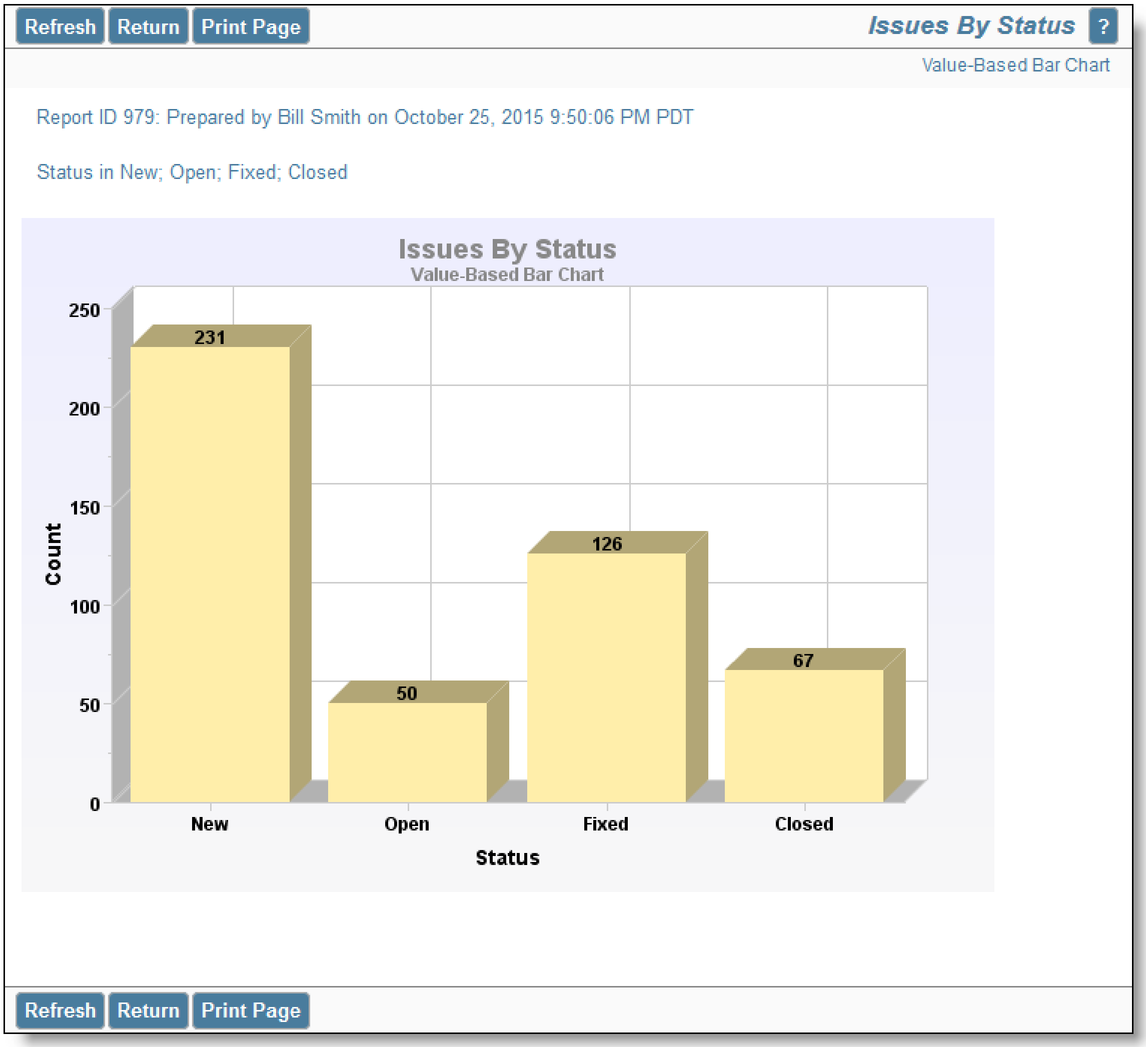


Value-Based Bar Charts

Choose the **value-based bar chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select one or two fields to chart. The lists presents all the potential enumerated list fields which are eligible for the value-based are chart type
- The current point in time is used to draw the chart
- If you want to use only some of the values within the field(s) you selected, set a filter for the field, and select the values you want to display on the chart output

A sample value-based bar chart looks like this:



Stacked Bar Charts

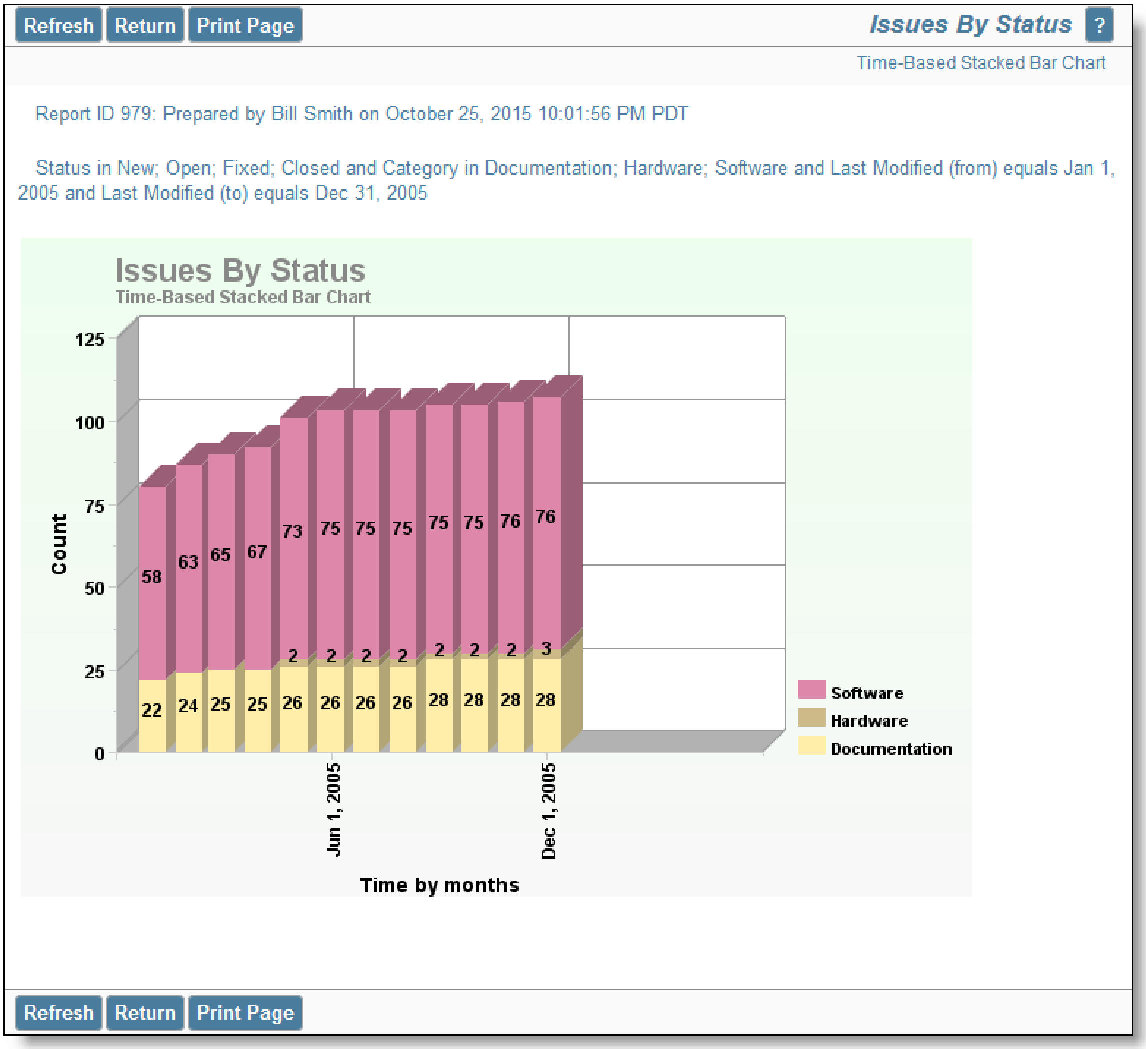
Time-Based Stacked Bar Charts

Choose the **time-based stacked bar chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select the field to chart. The list presents all the potential enumerated list fields which are eligible for the chart type
- From the field you select, you can choose multiple values within the field. Each value becomes a different segment of the stacked bars
- Select the Start and End dates. Note you can choose $$SYSDAY$$ to represent the current day, and you can perform simple arithmetic on the date. For example, $$SYSDAY$$ - 30 represents 30 days ago
- Choose the increment for the X axis, from days, weeks months and years

- Cumulative results include every item that matched criteria during the time period you selected. If this box is not checked then only the items that first transitioned to match criteria in the given time period are used to calculate the values displayed on the chart.

A sample time-based stacked bar chart looks like this:

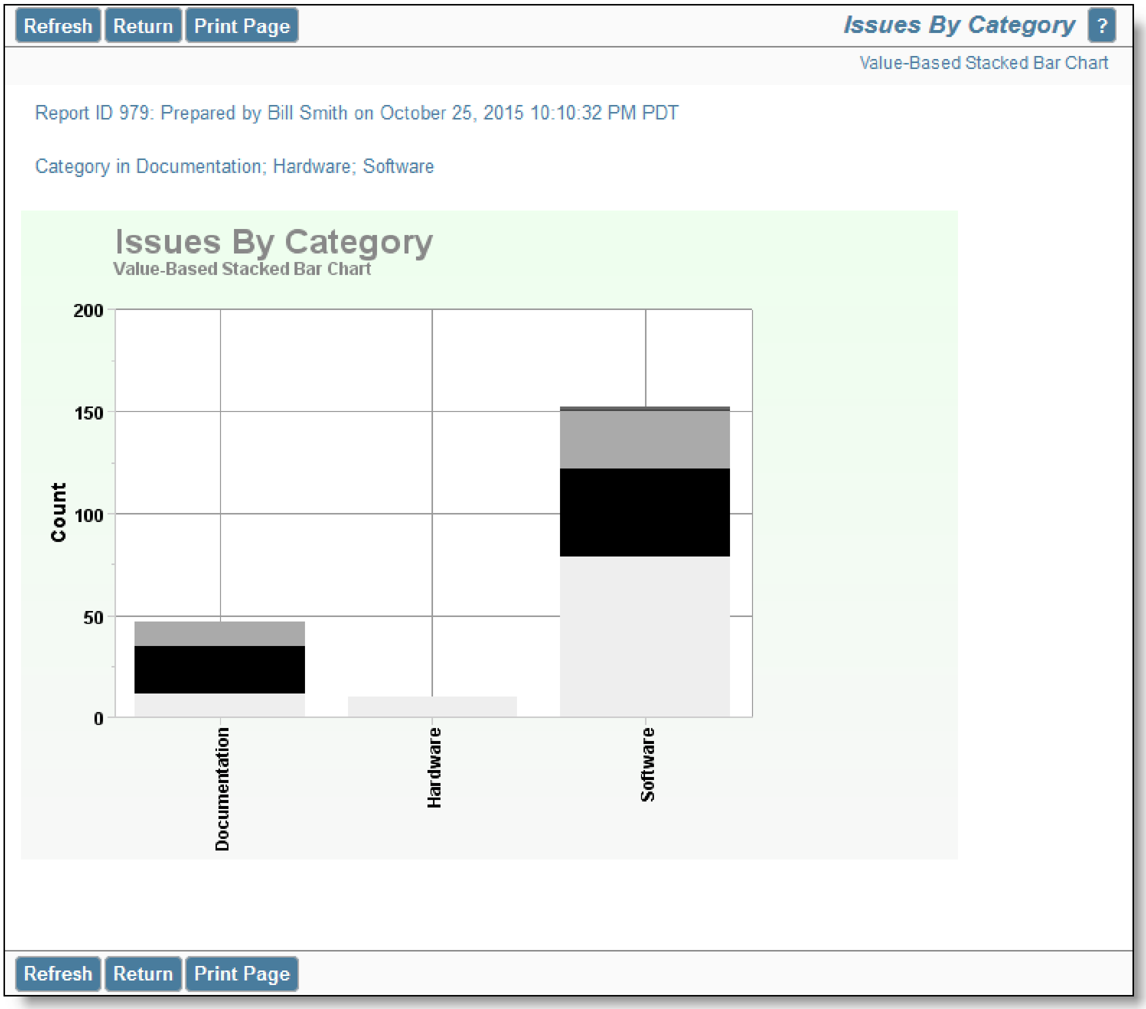


Value-Based Stacked Bar Charts

Choose the **value-based stacked bar chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select one or two fields to chart. The lists presents all the potential enumerated list fields which are eligible for the value-based are chart type
- The current point in time is used to draw the chart
- If you want to use only some of the values within the field(s) you selected, set a filter for the field, and select the values you want to display on the chart output

A sample value-based stacked bar chart looks like this:



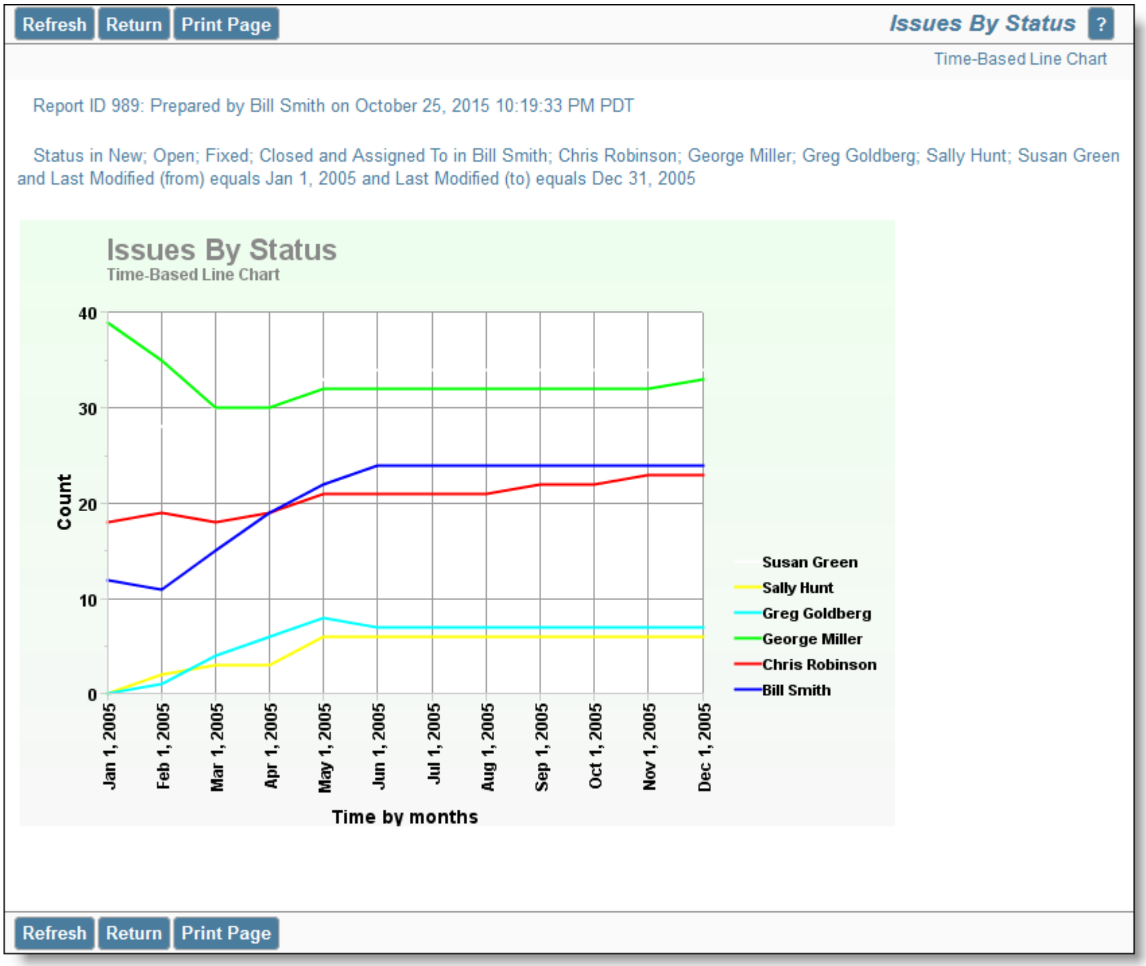
Line Charts

Time-Based Line Charts

Choose the **time-based line chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select the field to chart. The list presents all the potential enumerated list fields which are eligible for the chart type
- From the field you select, you can choose one, multiple or all the values within the field
- Select the Start and End dates. Note you can choose $$SYSDAY$$ to represent the current day, and you can perform simple arithmetic on the date. For example, $$SYSDAY$$ - 30 represents 30 days ago
- Choose the increment for the X axis, from days, weeks months and years
- Cumulative results include every item that matched criteria during the time period you selected. If this box is not checked then only the items that first transitioned to match criteria in the given time period are used to calculate the values displayed on the chart.

A sample time-based line chart looks like this:

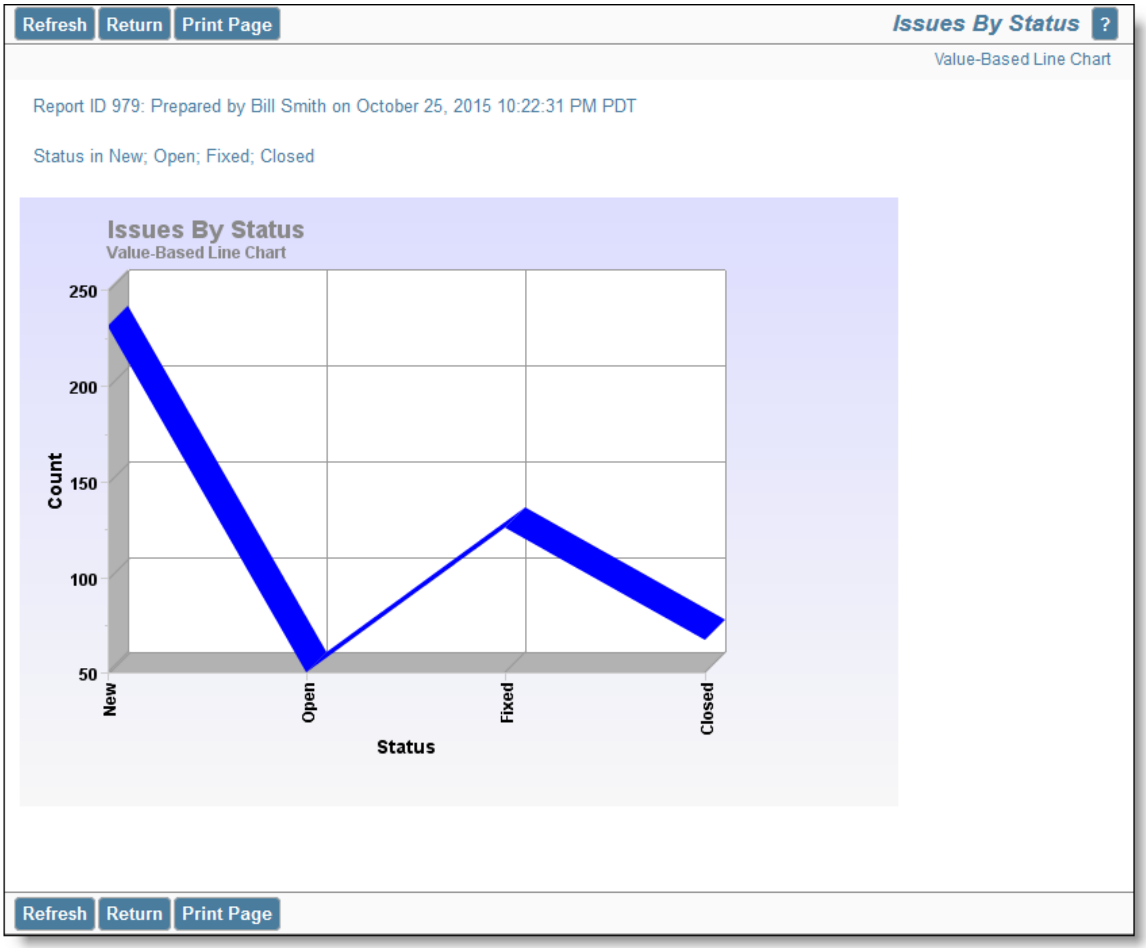


Value-Based Line Charts

Choose the **value-based line chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select one or two fields to chart. The lists presents all the potential enumerated list fields which are eligible for the value-based are chart type
- The current point in time is used to draw the chart
- If you want to use only some of the values within the field(s) you selected, set a filter for the field, and select the values you want to display on the chart output

A sample value-based line chart looks like this:



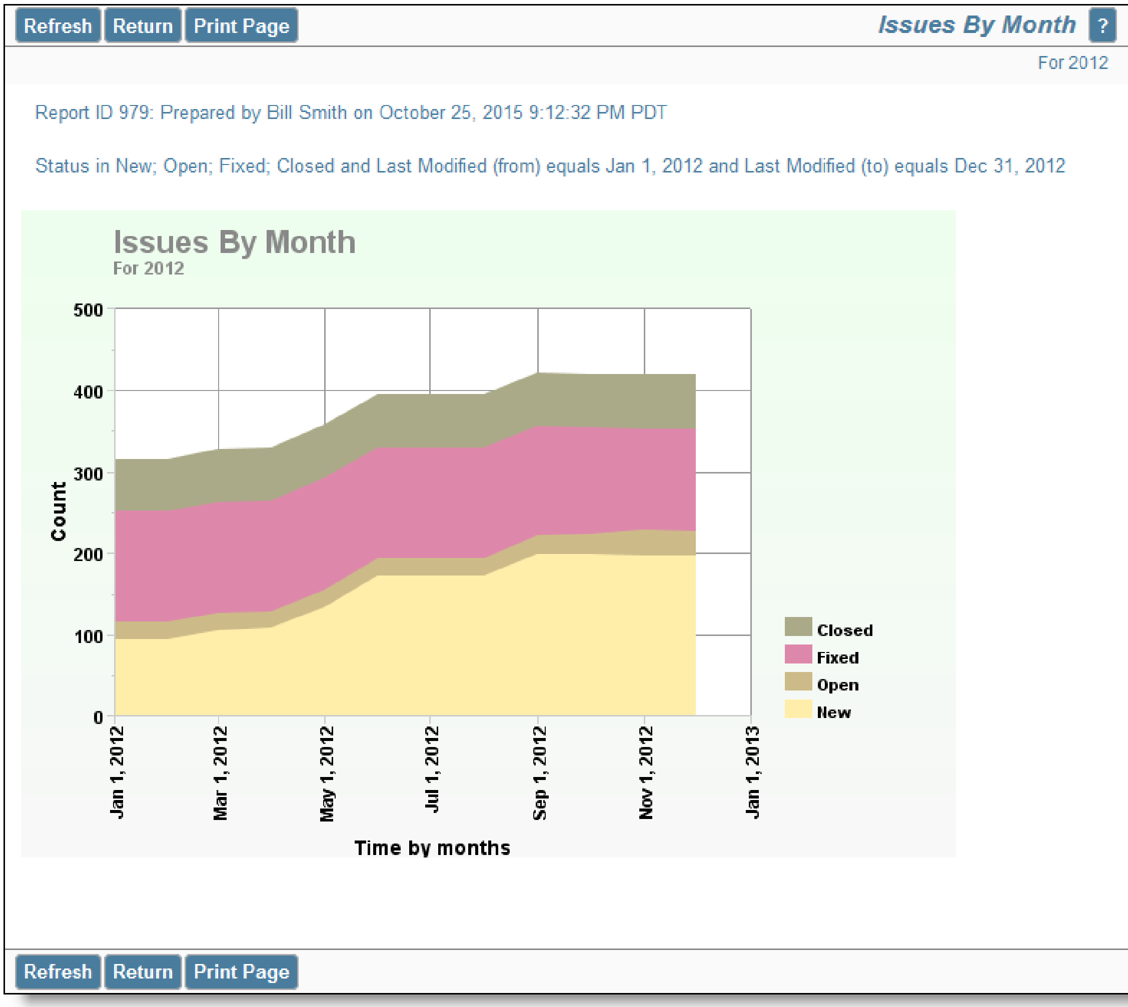
Area Charts

Time-Based Area Charts

Choose the **time-based area chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select the field to chart. The list presents all the potential enumerated list fields which are eligible for the chart type
- From the field you select, you can choose one, multiple or all the values within the field
- Select the Start and End dates. Note you can choose $$SYSDAY$$ to represent the current day, and you can perform simple arithmetic on the date. For example, $$SYSDAY$$ - 30 represents 30 days ago
- Choose the increment for the X axis, from days, weeks months and years
- Cumulative results include every item that matched criteria during the time period you selected. If this box is not checked then only the items that first transitioned to match criteria in the given time period are used to calculate the values displayed on the chart.

A sample time-based area chart looks like this:

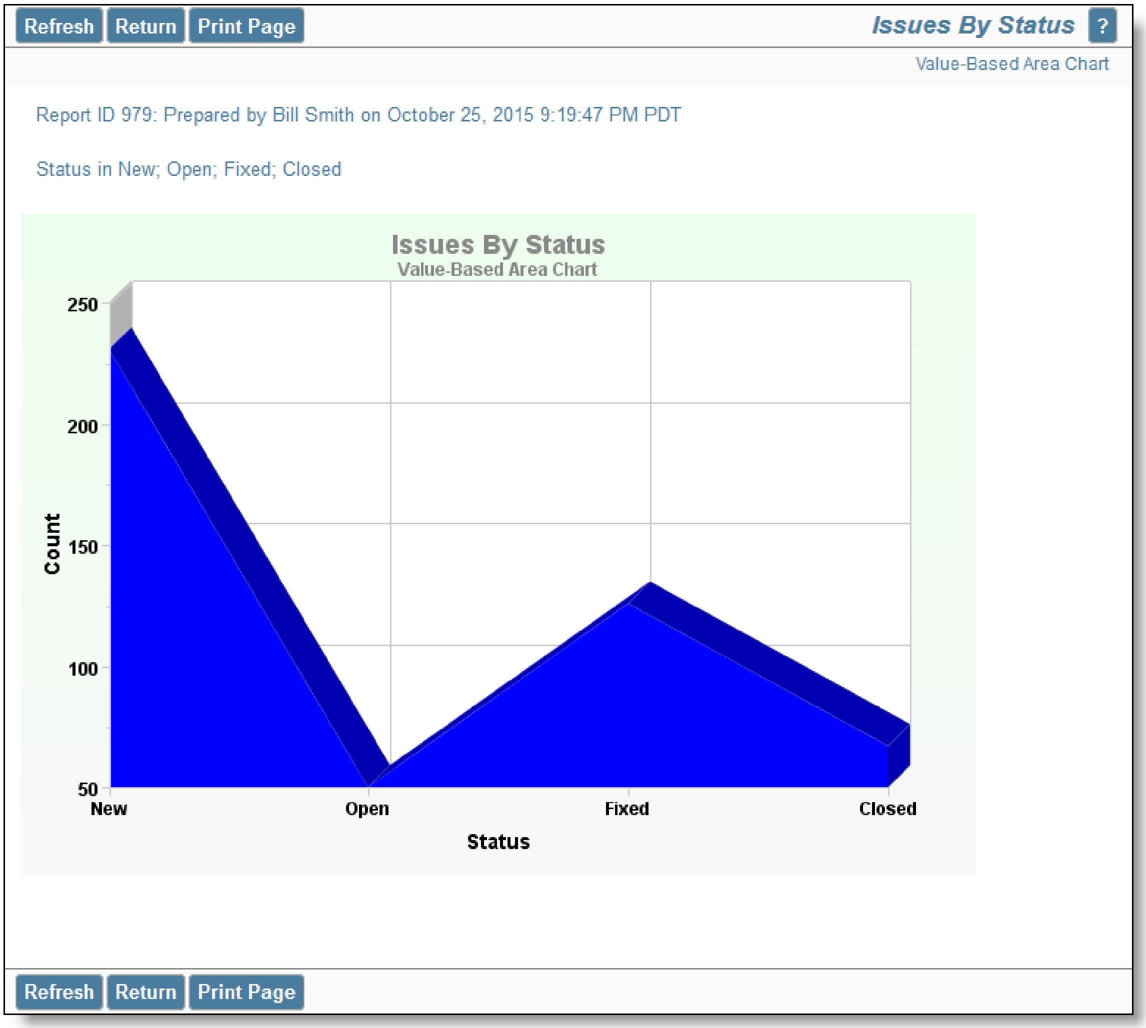


Value-Based Area Charts

Choose the **value-based area chart** type from the chart selection list. Complete the remainder of the form as follows:

- Select one or two fields to chart. The lists presents all the potential enumerated list fields which are eligible for the value-based are chart type
- The current point in time is used to draw the chart
- If you want to use only some of the values within the field(s) you selected, set a filter for the field, and select the values you want to display on the chart output

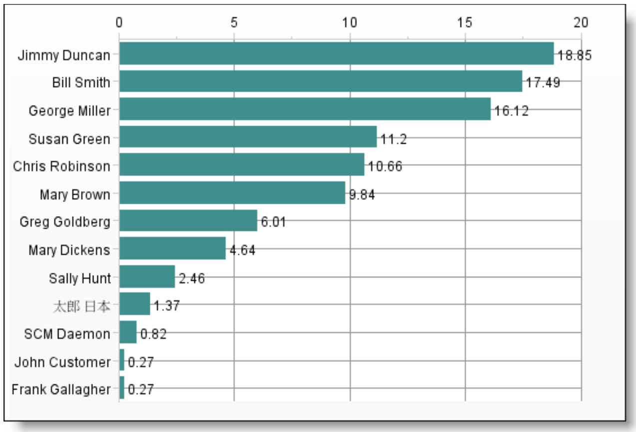
A sample value-based area chart looks like this:



Pareto Charts

Pareto charts plot a single enumerated list field, providing a count of the number of issues within each value, from high to low. You can select the maximum number of values to plot before lumping the rest of the values in an Other category.

A sample pareto chart display looks like the following:



Control Charts

Control Charts - cCharts

Control charts (cCharts) are viewed as one of the *Seven Basic Tools of Quality* (Reference - Montgomery, Douglas (2005). Introduction to Statistical Quality Control. Hoboken New Jersey: John Wiley & Sons, Inc.). Control charts are used to help identify if business and/or manufacturing processes are currently under control, and to also predict future performance. If the process if out of control, the chart can be used to help identify areas that require further analysis.

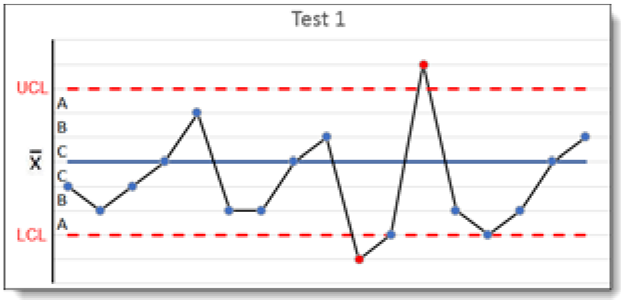
The ExtraView documentation is not intended as a thorough treatise on the use and interpretation of control charts. The user is expected to be familiar with the concepts and to understand the topic.

A control chart renders 3 horizontal lines which indicate the Upper Control Limit (UCL), the Lower Control Limit (LCL) and the Mean ($\bar{X}$). The UCL is $+3\sigma$ from the Mean line and the LCL is -3σ from the Mean line.

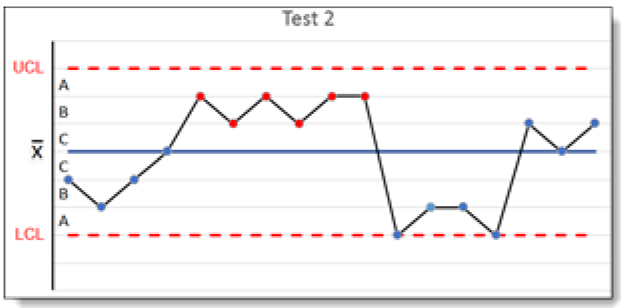
Visible indicators are used to identify data points that signal areas of concern. Points on the chart that are deemed to be behaving in an unusual way are referred to as *Special Cause* points. These points are colored red.

There are up to 8 tests that can be used to identify *Special Cause* points. Any combination of tests can be selected and any integer can be set as the test condition for that test. The conditions referenced below are examples and are not necessarily considered to be standard default values. Examples of the use of control charts with these tests are:

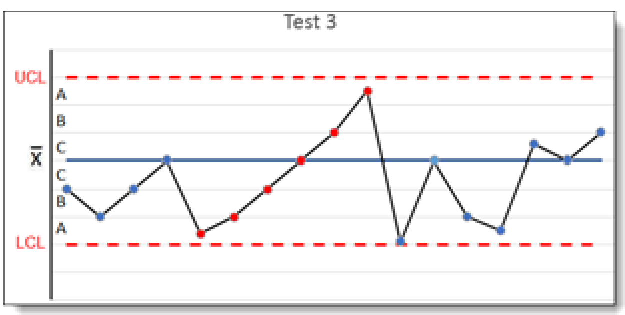
Test 1: Any point outside of the Upper and Lower Control Limits



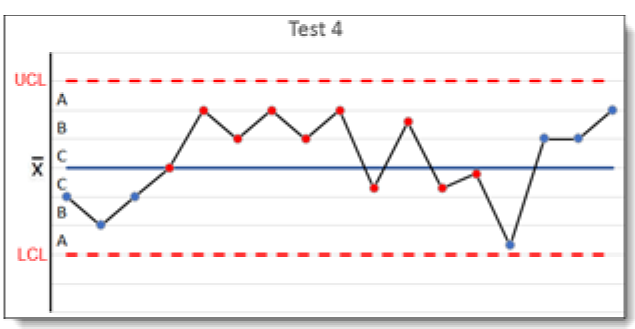
Test 2: 5 points in a row on the same side of the Mean line. (Default is 9)



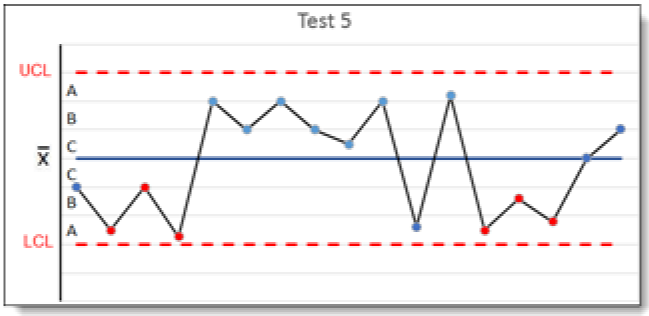
Test 3: 6 points in a row increase or decreasing in the same direction (Default is 6)



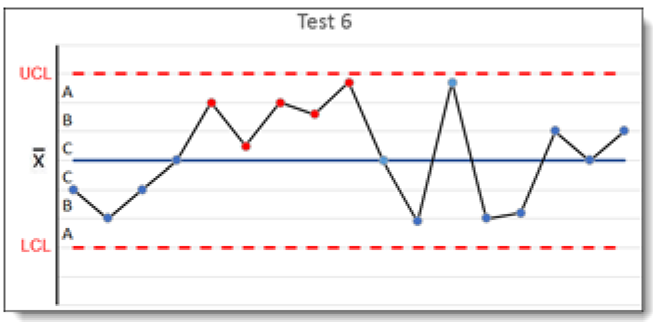
Test 4: 10 points in a row in alternating directions. (Default is 14)



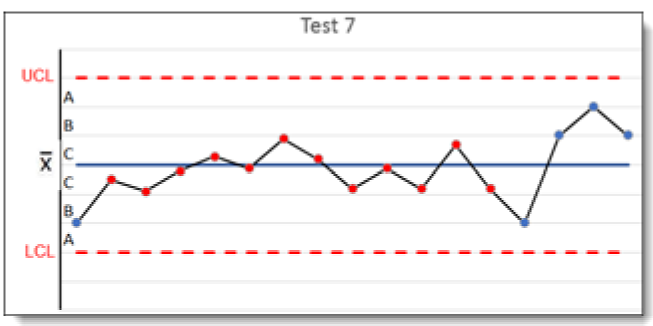
Test 5: 2 out of 3 points more than 2σ from the Mean line (same side). This would be points outside of sections B and C on the graph. (Default is 2)



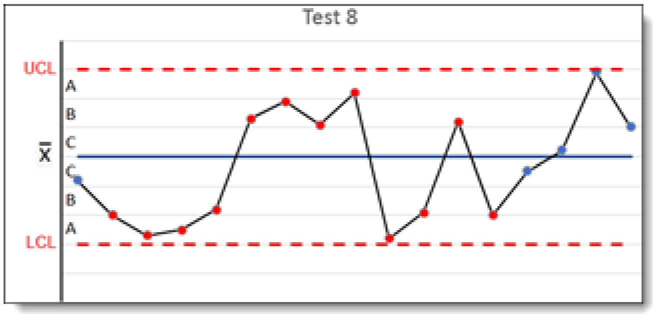
Test 6: 4 out of 5 points more than 1σ from the Mean line (same side). This would be points outside of section C on the graph. (Default is 4)



Test 7: 12 points in a row within 1σ of the Mean line (either side). This would be points inside of section C on the graph. (Default is 15)

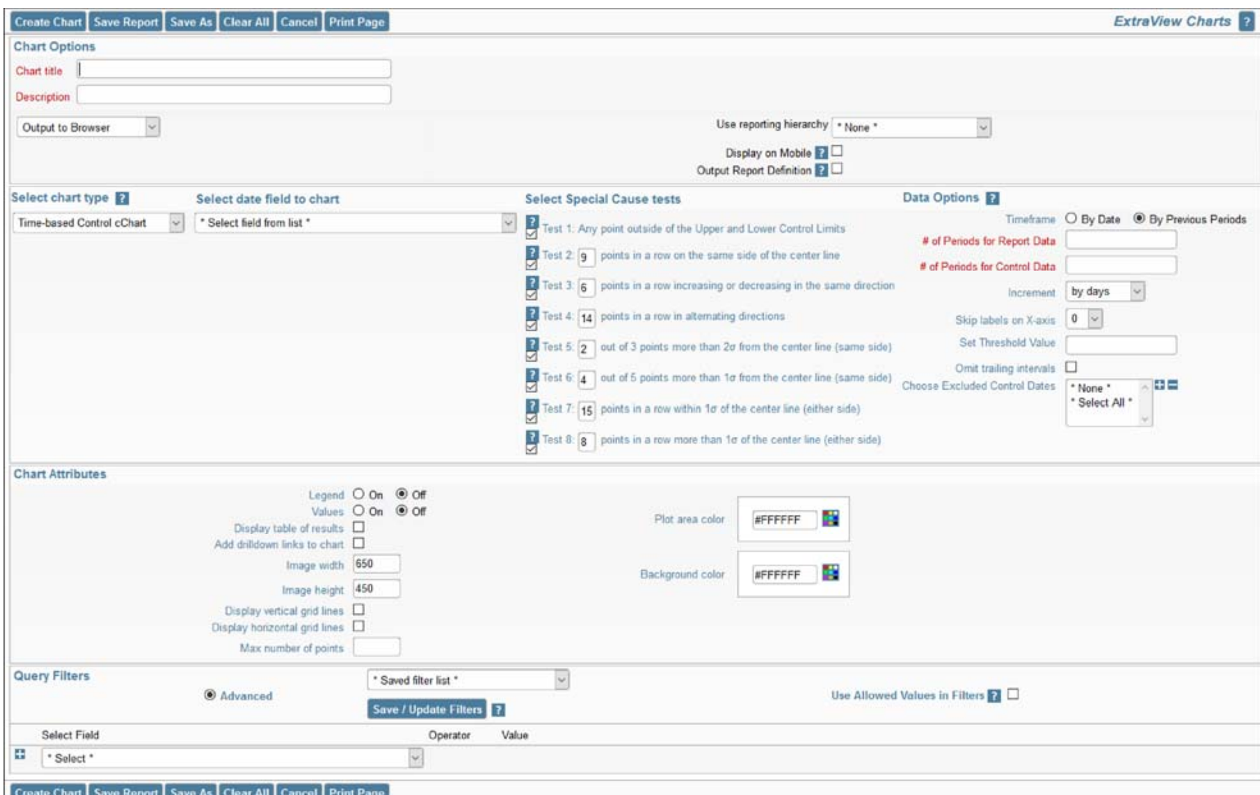


Test 8: 12 points in a row more than 1σ of the Mean line (either side). This would be points outside of section C.



Time-Based cCharts

The time-based control chart allows the user to select a date field to be used and displayed on the x-axis. In order to create a new time-base control chart, choose the **Create New Chart Report** option and then choose **Time-based Control cChart** as the chart type. Follow the steps corresponding to the labels on the screenshot below:



1 **Chart Options** - Enter the title and descriptions for the chart

2 **Chart Type** - Select the Time-based Control cChart option

3 **Date Field to Chart** - Select from a list of the date fields presented in the list

4

Select Special Cause tests - These options provide the flexibility of specifying the number of points required for each special cause rule. Defaults are provided for the values of the special cause tests and the user may select different values. To turn on one of the tests, check the box at its left. This step highlights points visually on the chart that violate the rules you require. An understanding of cCharts is important when altering the values for these tests

5 **Date Options** - The available options in this section are:

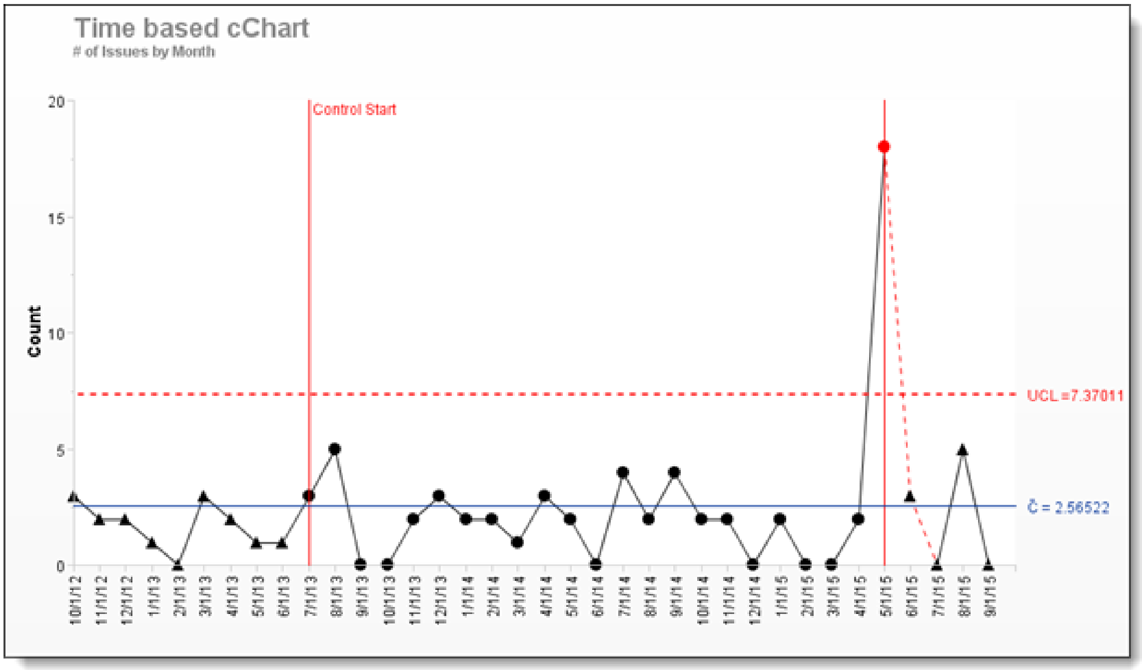
- With the **Timeframe** option, either choose a timeframe from a specific start date with a specific number of periods for the control data, or select by previous periods, where you may choose the number of periods for the report data as well as the number of periods to use for the control data
- You may I**ncrement** the periods reported on the x-axis by either days, weeks, months, years or quarters
- To clarify the display of the x-axis dates, you may skip a number of labels
- The **Threshold Value** allows you to control the presence of a horizontal threshold line on the control chart display
- If you check **Omit trailing intervals**, you are controling whether the date interval starts on the first day of the month
- **Choosing Excluded Control Dates** allows you to exclude data for specific dates from being computed as control data points

6 **Chart Attributes** - These are the common chart attributes used to embellish the display of all charts

7 **Query Filters** - Select the approriate filters to be used to select the data set being used to compute the results

8 **Create Chart** - Click the button to produce the control cChart.

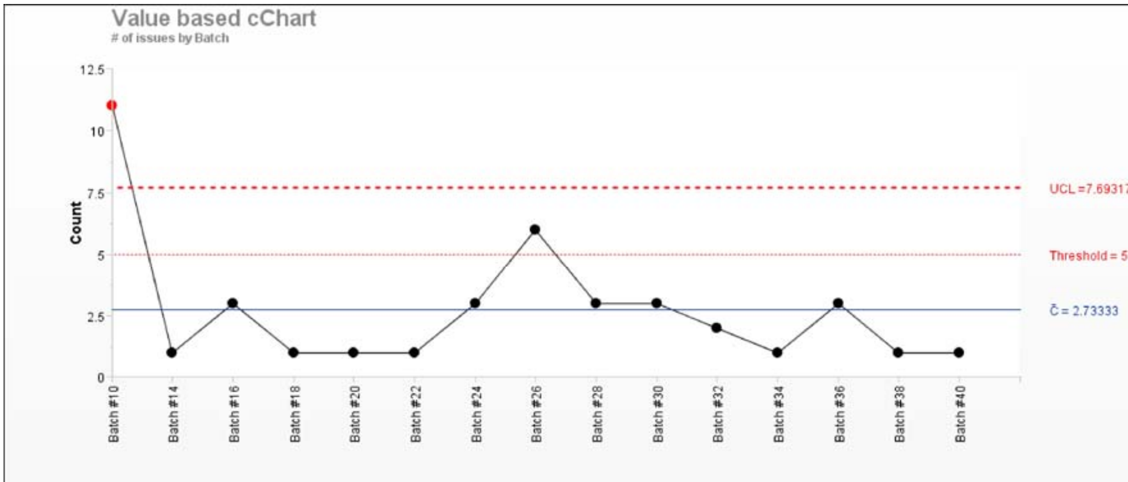
A sample time-based control cChart is shown here:



Value-based Control charts

Value-based control charts allow the user to select an enumerated type field to be used on the x-axis. This differs from time-based control charts where a date field is used as the x-axis.

Value-based control charts are set up in a similar fashion to time-based control charts. The key difference is that you choose an enumerated field such as a list field to display on the x-axis. You do not need to enter any date range information. The typical output of a value-based cChart is as follows. The screenshot also shows how a table of results may also be displayed.



Inventory Batch	Count	LCL	UCL	Mean	Special Causes	Threshold Value
Batch #10	11	-2.22651	7.69317	2.73333	*	*
Batch #14	1	-2.22651	7.69317	2.73333		
Batch #16	3	-2.22651	7.69317	2.73333		
Batch #18	1	-2.22651	7.69317	2.73333		
Batch #20	1	-2.22651	7.69317	2.73333		
Batch #22	1	-2.22651	7.69317	2.73333		
Batch #24	3	-2.22651	7.69317	2.73333		
Batch #26	6	-2.22651	7.69317	2.73333		*
Batch #28	3	-2.22651	7.69317	2.73333		
Batch #30	3	-2.22651	7.69317	2.73333		
Batch #32	2	-2.22651	7.69317	2.73333		
Batch #34	1	-2.22651	7.69317	2.73333		
Batch #36	3	-2.22651	7.69317	2.73333		
Batch #38	1	-2.22651	7.69317	2.73333		
Batch #40	1	-2.22651	7.69317	2.73333		

Control Charts - uCharts

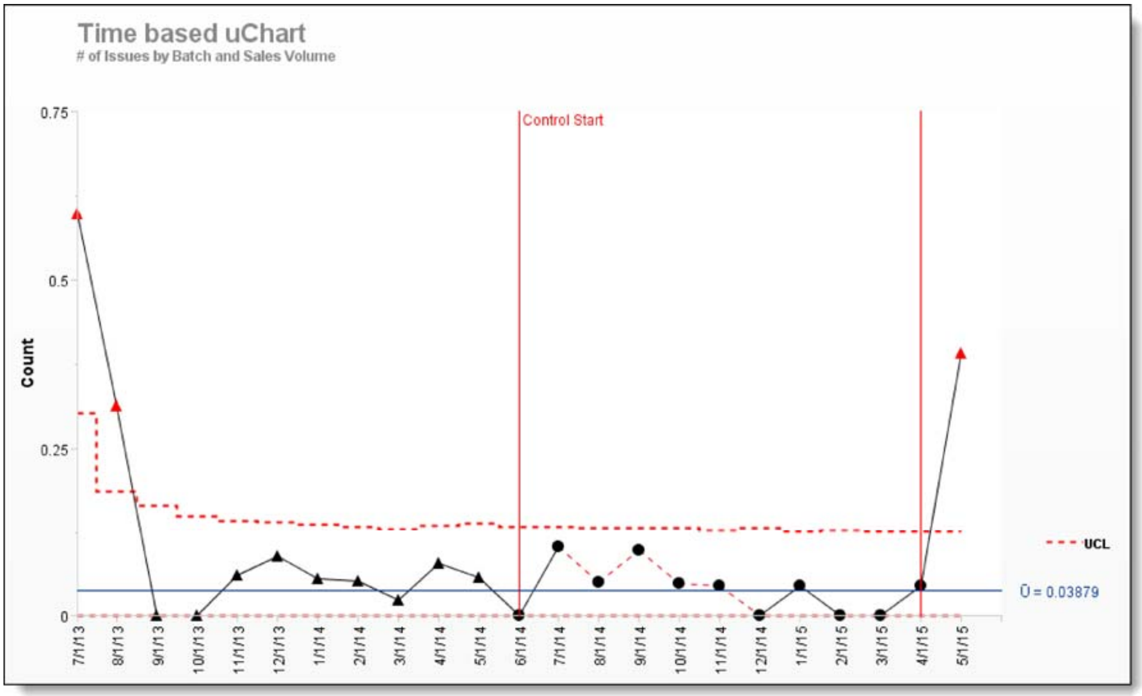
uCharts are a type of control chart used to monitor "count"-type data where the sample size is greater than one, typically the average number of nonconformities per unit. Time-based control uCharts are used if the same sample size is variable. uCharts allows the user to select a date field to be used on the x-axis. They chart records over time in relation to a volume amount.

uCharts differ from cCharts in that they account for the possibility that the number or size of inspection units for which nonconformities are to be counted may vary. Larger samples may be an economic necessity or may be necessary to increase the area of opportunity in order to track very low nonconformity levels.

Preparing a Time-Based uChart is similar to creating a cChart. The differing options are:

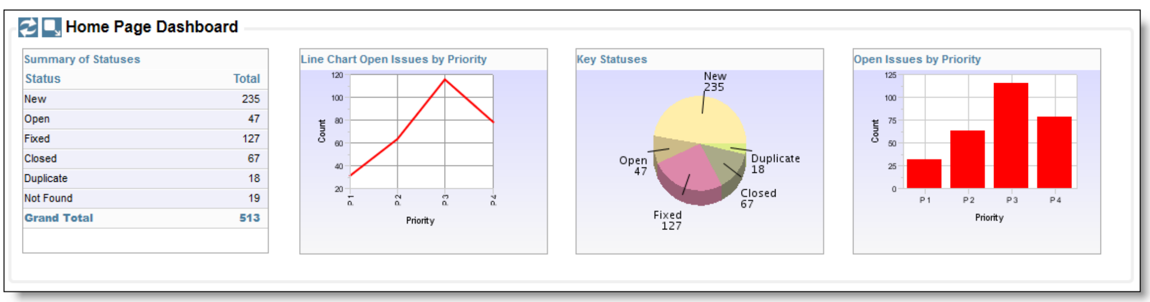
- Select the **Time-based Control uChart** from the selection list of chart types
- Select a **Date field to chart** from the list
- Select a **Date field to aggregate volume by** from the list
- Select **field for volume amount** from the list of numeric type fields

A sample time-based uChart look like the following screenshot:



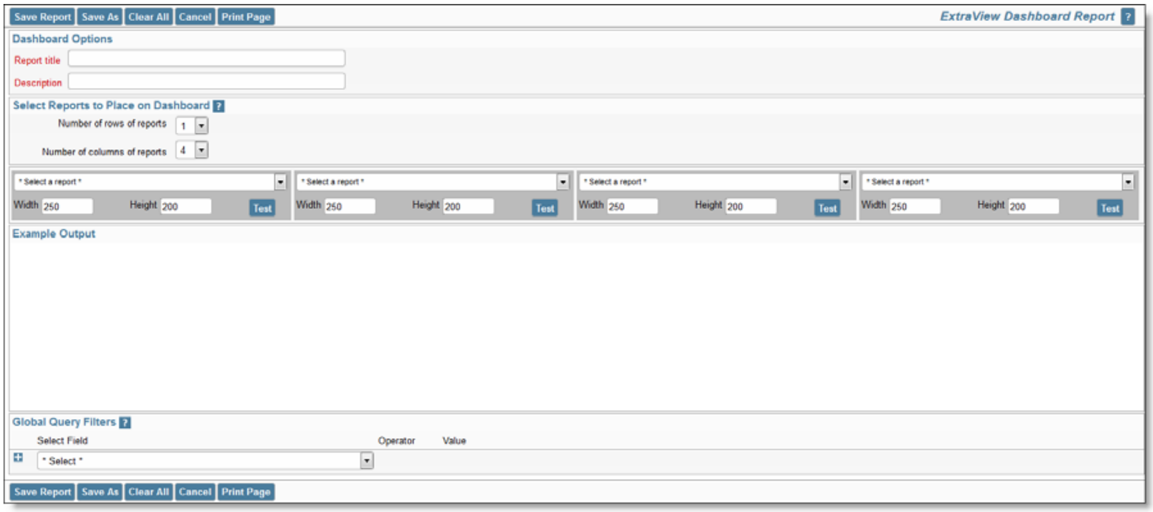
Dashboard Reports

Dashboard Reports are created for the purpose of placing these on user's Home Pages. Like all other reports, they may be personal or shared. A dashboard report is designed to show summary information. This summary information may originate in a Summary Report, a Matrix Report, an Aging Report, a Chart or a Custom URL report.



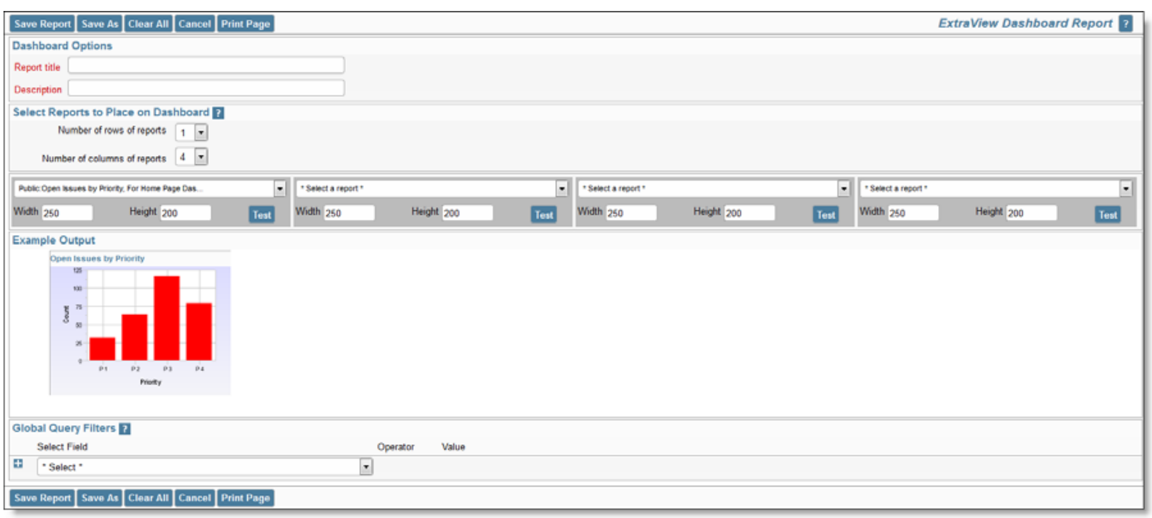
A typical Dashboard Report

You may place up to 10 individual reports on a Dashboard Report, up to 10 horizontally, and up to 10 vertically. Care should be taken when designing a Dashboard Report, to ensure that you place these in a readable fashion and that you do not try to place too much information on the dashboard. To create a new Dashboard Report, choose the option **Create new dashboard report** from the list of new report types on the Query screen and press the **Go** button. You will see a screen similar to the following:



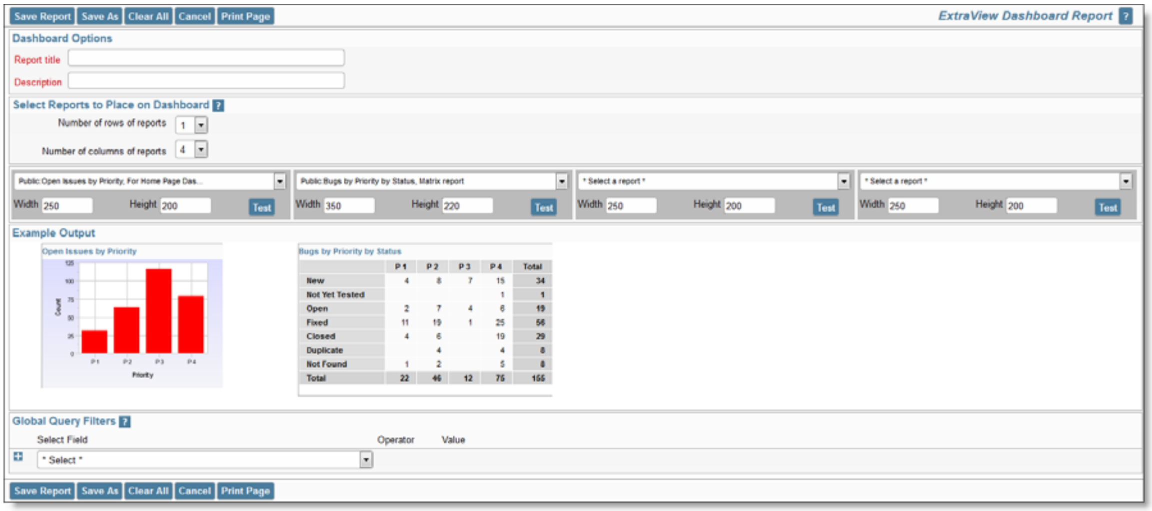
Creating a new Dashboard Report

Like all other reports, you may set the report title and description. Note that the report title will be displayed as the title to the entire dashboard report when it is placed on your Home Page. You can alter the number of rows and columns of the reports contained in the dashboard report at any time, when first creating or when editing a dashboard report. When editing a report, there is a button to the right of the **Report Title**. When you place your mouse over this button, you will see who created the report, who last updated the report and the dates when these actions occured. This is most useful for managing public reports. The reports that may be placed on the dashboard report are placed in select lists; you may alter the display size of any report by using the **Width** and **Height** options. These are measured in pixels. Note that you should not exceed the width of the window for your dashboard reports. The overall default size is set by the administrator, and is typically around 1,000 pixels. The **Test** button allows you to run the report and place it on the dashboard so you can check for the presentation.

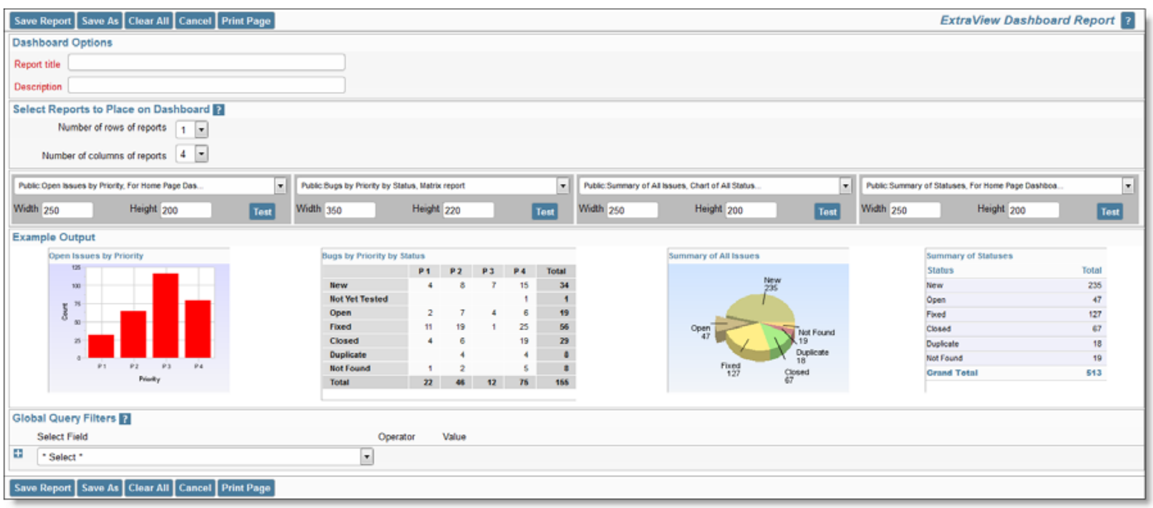


One chart placed on a Dashboard

As you place reports onto the dashboard, it is recommended that you resize immediately. Note that when we placed the next report on the dashboard, we resized the output to a width of 350 and a height of 220, to retain a reasonable presentation of the results. All titles are placed at the top of the individual dashboard reports, and the reports are always rendered with the *small* font size, no matter the user's personal option setting. This is to allow sharing of the dashboard amongst users who may have selected different text sizes and to maximize the amount of information on a dashboard.



Placing a second report on a Dashboard



Completing a single-row Dashboard Report

Once you have saved your dashboard report, you may place it on your Home Page, in exactly the same way as any other report. Dashboard reports have one special property not shared with other reports. If you are going to share a dashboard across a user role, or make it public, only the dashboard report itself needs permission to be run by the other users. The other users do not need to have permission to run the reports within the dashboard. This permission will be given to them automatically. This allows you to keep the reports within the dashboard as personal reports so that the other users may not individually run or edit these reports. However, the individual field permissions still apply so users will not see fields to which they do not have read permission.

Runtime Replacement Filters

Setting runtime replacement query filters on dashboard reports allow you to apply these filters to all the individual reports configured within the dashboard report. For example, you might want to apply the same date range to all the reports, or to select a single report as a filter for all the reports. Note that if any of the reports contain a filter on a field used as a runtime replacement filter, then the filter at the individual report level is dropped completely and replaced with the runtime replacement filter for the field.

For example, you might want to apply a runtime replacement filter that applies the same date range to all the output, or apply a filter that provides only results from a specific product within the output.

When you specify runtime replacement filters within a Dashboard Report, they will replace filters for the same field within the individual reports that they contain. If a filter on a field specified at the dashboard level does not appear within the contained report, it will have no effect. Further, it is not possible to specify conjunctions for the runtime replacement filters - they simply replace filters for the same field within the contained reports. The runtime replacement filters are always displayed in expanded mode, allowing you to make multiple selections within a field. Runtime replacement filters within a dashboard report are ignored if the dashboard report is placed on a Home Page. It would not be good behavior to stop every entry to the Home Page and ask for a replacement filter to be selected.

Tip: A typical use case might be to create a dashboard that contains several reports about all your products, but you want to filter on the report output by a single product. You cannot select a runtime replacement filter with a value similar to *Product = Any*, but you can select all the product values in the list and store that as your filter. Then, after viewing the dashboard, you can select a new filter value that is either just one, or a selection of products.

Custom URL Reports

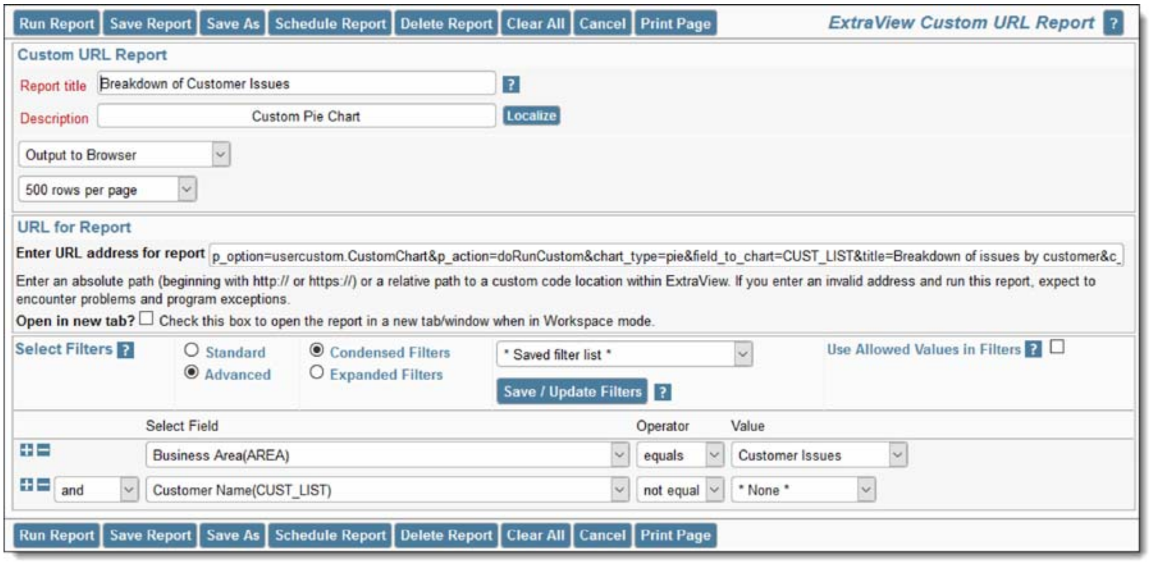
As the name implies, Custom URL reports allow the user to create a custom report, which may or may not involve execution of the report within ExtraView. The key point is that these reports use the ExtraView framework to present the report.

For example, the report may execute ExtraView custom code to present results in a way that the inbuilt ExtraView functions were never designed. As well as executing code within ExtraView, Custom reports can run almost anything that can be accessed via a URL.

Note that the security of your browser may be set such that URLs may not be opened within an ExtraView screen, as this might be seen as a cross-domain event. Most browsers have settings that allow you to control this. For example, within Internet Explorer, you can set the domain of the site you want to view within a dashboard report, to *trusted* status.

Example 1

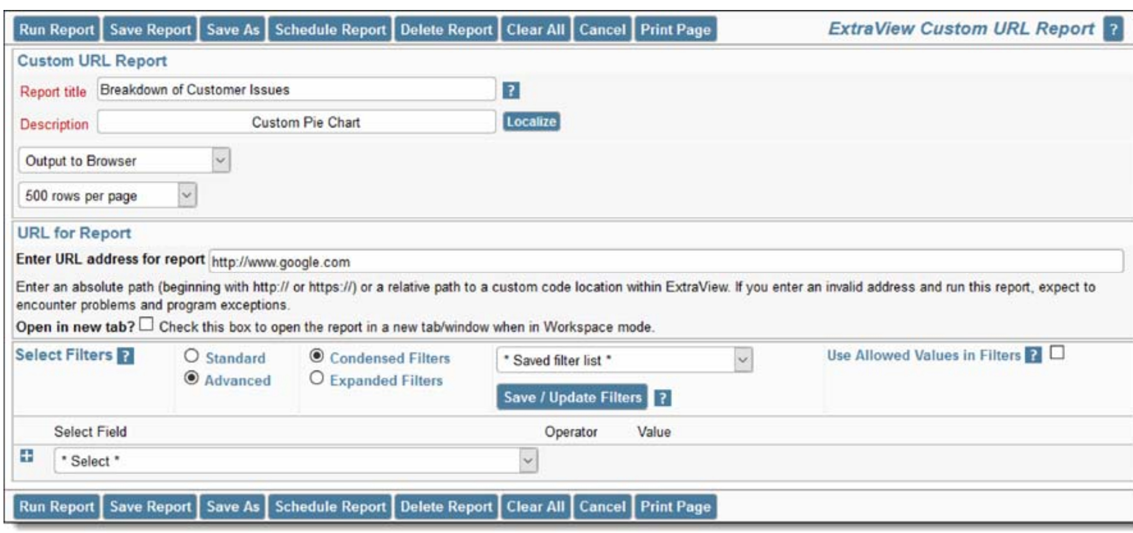
This shows the preparation of a report executed with custom code within the ExtraView environment. Note on the screenshot how a URL is called within the ExtraView environment, and how filters that are set can be passed to the code:



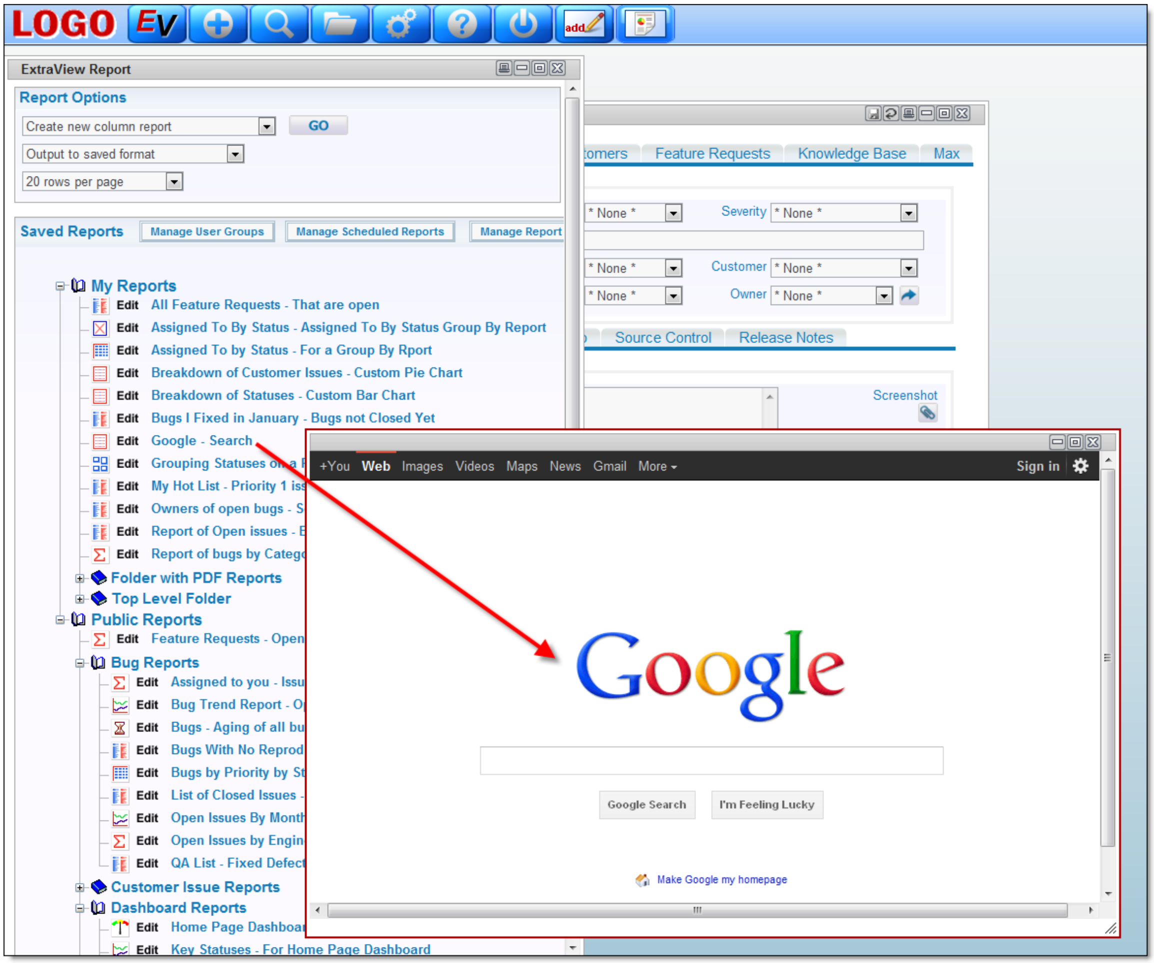
Preparing a Custom URL report that executes code within the ExtraView environment

Example 2

Here we will access a URL outside of ExtraView, the Google search page, and then open this within the ExtraView enviroment. The second screenshot shows how this "report" may be accessed from within a workspace:



Creating a Custom report that accesses the Google search engine



The Google search screen within a workspace

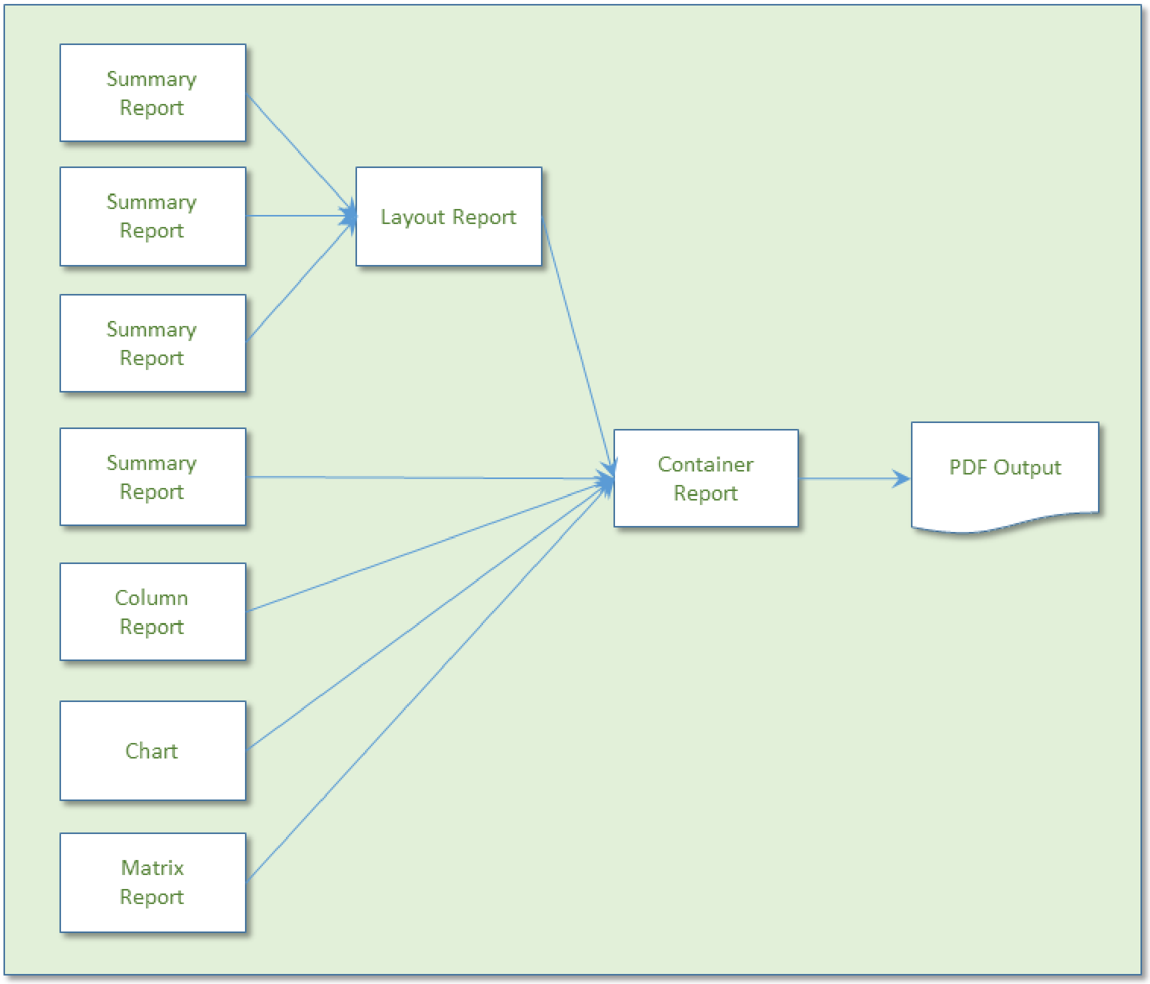
Report Layouts / Container Reports

Container Reports

Container reports are designed to output to the Adobe PDF format only. They do not output their results to any other format. Container reports are designed to allow more than one report to be placed into the output. Container reports are typically used to prepare a reporting pack where multiple individual reports are to be circulated. For example, you can place several reports and charts within a single PDF report. To achieve this, you place existing saved reports into a Container, and then run the Container with its indivudal reports.

A useful point is that you may schedule the Container report to be generated on a periodic basis and then distributed automatically to the appropriate users within your organization.

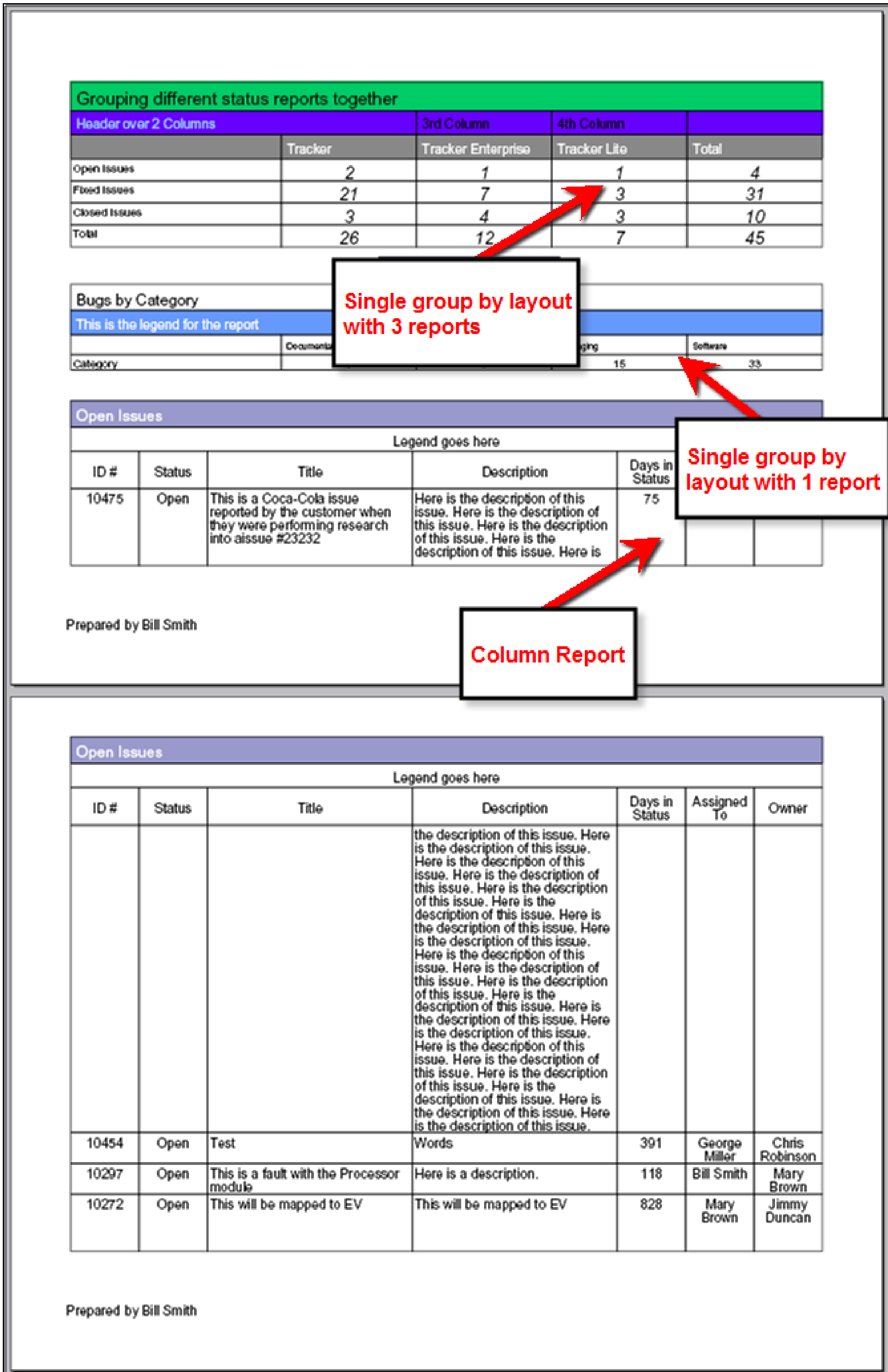
There is an alternative intermediate format called a *layout for an existing report*, These layouts may be used to embellish individual reports with styling and to further group individual summary reports into a single output These layout reports may also be placed into the container from which the PDF output file is created.



Sample process of preparing layout and container reports

Container reports also have other attributes that assist in the creation of professional reporting packs. For example, they have title pages for the report, and you may implement headers and footers throughout the document you produce. The headers and footers may contain information such as page numbers and the date of production.

At their simplest, you can use the process to convert a single report or chart to a layout and then place it in a container as a method of outputting the report or chart to a PDF. At a more complex level, the container report may create a PDF that contains many reports that with traditional output must be output one at a time. Also, with the process described here, you can alter the style of many elements of the output, such as the font size and styling of the headers or data on the PDF output. A sample PDF report output over multiple pages may look like this:



Grouping different status reports together

Header over 2 Columns		3rd Column	4th Column	
	Tracker	Tracker Enterprise	Tracker Lite	Total
Open Issues	2	1	1	4
Fixed Issues	21	7	3	31
Closed Issues	3	4	3	10
Total	26	12	7	45

Bugs by Category

This is the legend for the report

	Documenta...		...ging	Software
Category			15	33

Open Issues

Legend goes here

ID #	Status	Title	Description	Days in Status		
10475	Open	This is a Coca-Cola issue reported by the customer when they were performing research into aissue #23232	Here is the description of this issue. Here is the description of this issue. Here is the description of this issue. Here is the description of this issue. Here is	75		

Prepared by Bill Smith

Open Issues

Legend goes here

ID #	Status	Title	Description	Days in Status	Assigned To	Owner
			the description of this issue. Here is the description of this issue.			
10454	Open	Test	Words	391	George Miller	Chris Robinson
10297	Open	This is a fault with the Processor module	Here is a description.	118	Bill Smith	Mary Brown
10272	Open	This will be mapped to EV	This will be mapped to EV	828	Mary Brown	Jimmy Duncan

Prepared by Bill Smith

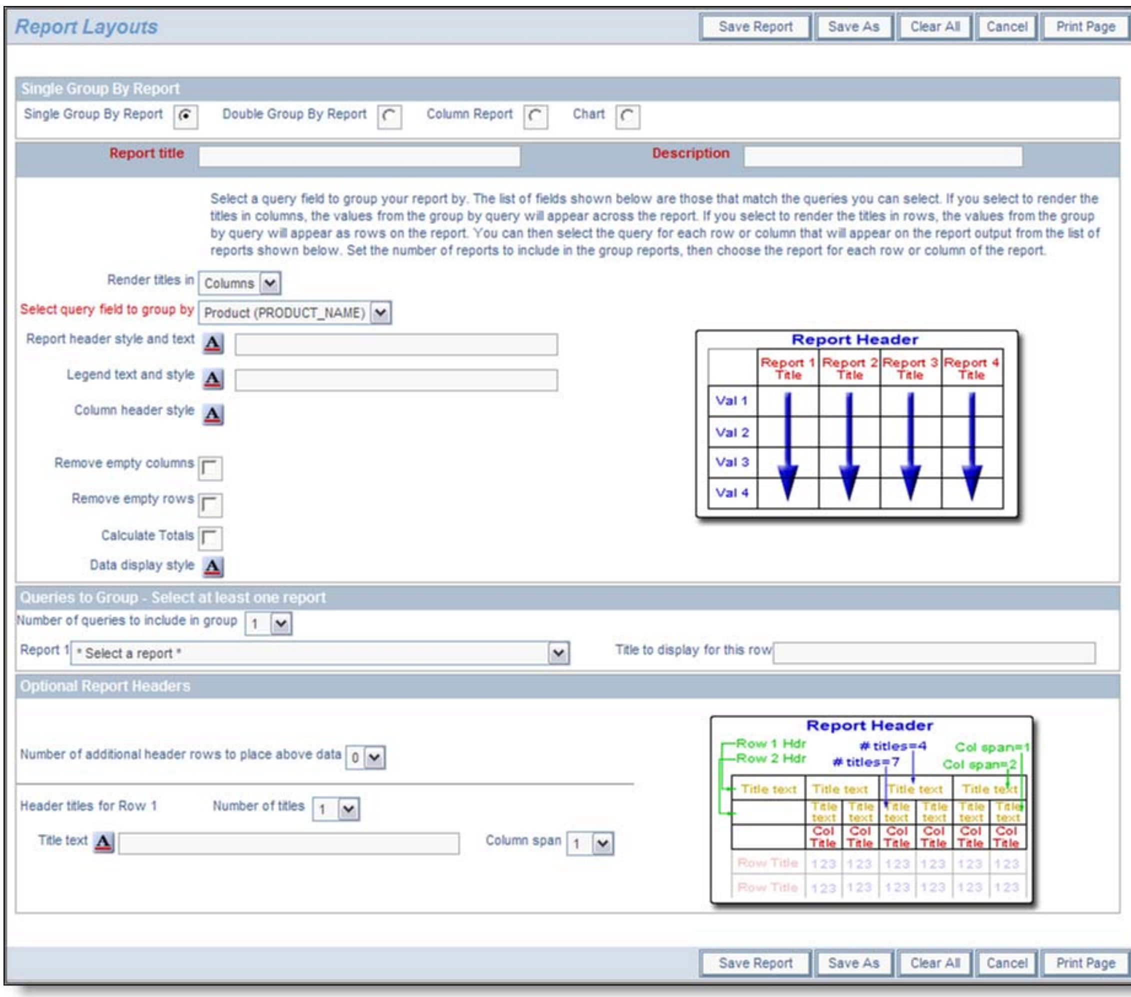
PDF output of several report layouts

Single Group By Layouts

Single group by layouts are prepared by first designing one or more Summary reports, **each with a single field** as the object of the summary list. For example, you may prepare a Summary report using the **product_name** or the **area** field. Any filters may be applied to each of the reports.

Further, each of the summary reports may use a different field as its object. This will allow you to prepare a layout where each row or column of the layout represents a totally different variable being counted. Thus you can have different rows or different columns represent different information on a single report.

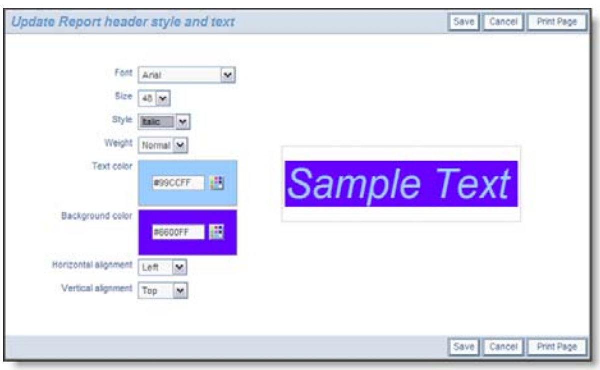
To prepare a Single Group By layout report, choose the **Create layouts for existing reports** from the **Query / Report Options** list and press the **GO** button. You will see the following screen:



Preparing a single group by report

Note that the radio button selection at the top of the screen already reflects your choice of the Single Group By report. To prepare the report:

- Decide whether the titles for each Summary report that is to be rendered are to be in the columns or rows of the report. Notice that the image that portrays the style of the report changes to represent your choice
- Within the field **Select query field to group by**, you will see a list of all the Summary reports that are possible to select. These will all be Summary reports that have a single field selected for the summary. These reports must all exist before you create the layout
- Enter the text for the report header and for the legend to appear under the header
- For each of the report header, the legend, the column header and the data display, you can set the style of the output by using the button. When you hold your mouse over the button, you will see a summary of the style that is set. When you click on this button, you will see a pop up window where you can set the style



- There are options in the form of checkboxes that allow you to suppress empty columns and empty rows on the report output
- Next there is an option that you can check to automatically compute totals for the report. If you are rendering titles in Columns, then you will get column totals, if you are rendering the output in Rows, then you will get row totals on the output
- Next, you set the number of queries you want on your report. For each query, you will have a selection list from which to select the reports. Then you select the reports, and you select the title to display for each of the reports
- You are able to create complex, multi-line headers above the columns of data, using the capability in the **Optional Report Headers** section. You define the number of header rows, and then for each row you can define how many individual headers you require, and how many columns each of these will span. Please be careful to calculate these numbers accurately, as ExtraView does no checking and incorrect calculations will lead to strange-looking results. The diagram on the screen shows how the optional headers will appear
- When you have completed the screen, **Save** the report. Note that you cannot run the report directly; it must first be placed in a container report before you can run it and output it to a PDF.

Example Single Group By Report

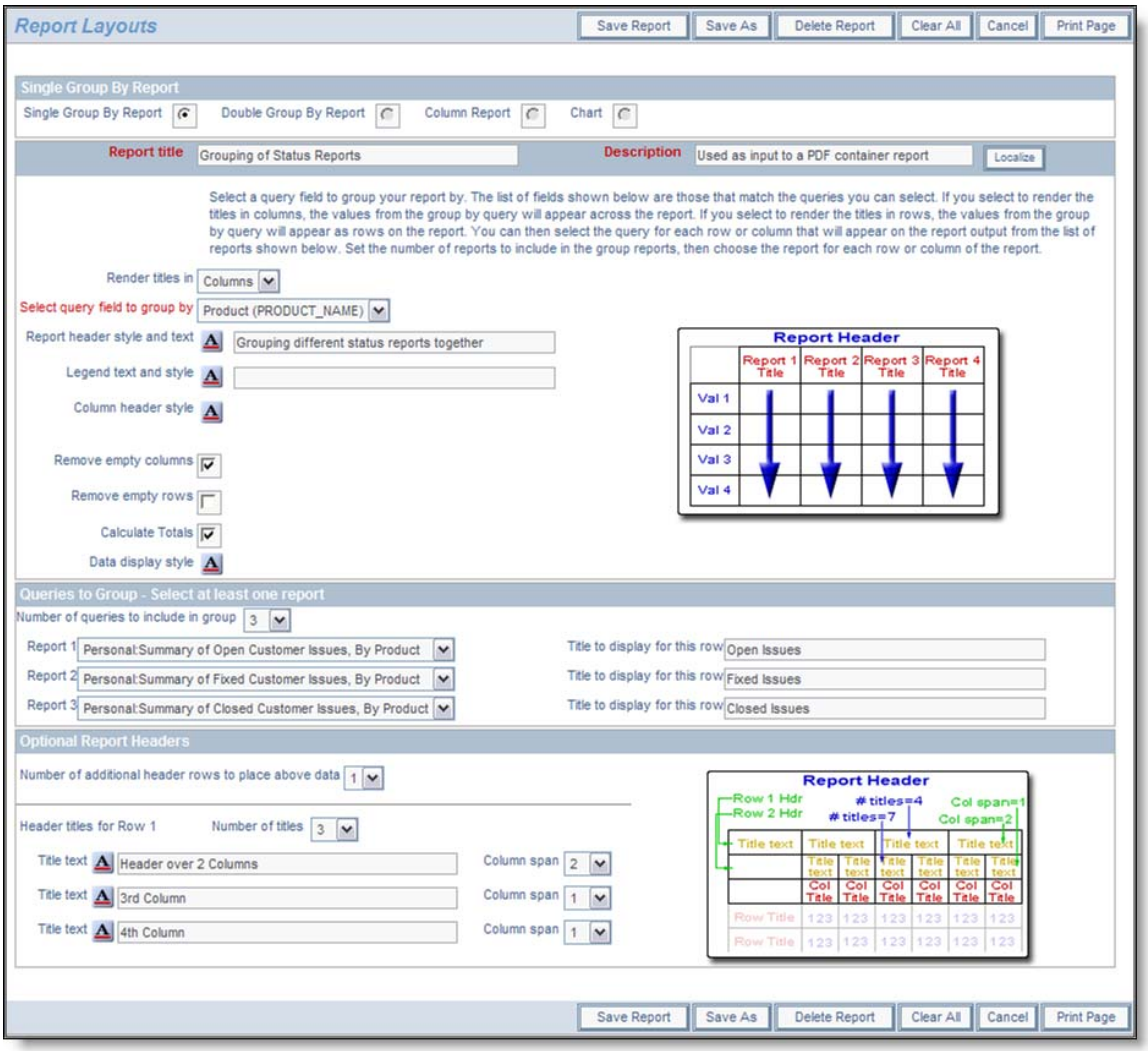
First create and save three summary reports. Each of these has the **product_name** field (titled **Product**) as the selected field. For each of the three reports, select a single filter, as follows for each report:

- Status = Open
- Status = Fixed
- Status = Closed

You will now have three summary reports titled something like:

- Summary of Open Customer Issues
- Summary of Fixed Customer Issues
- Summary of Closed Customer Issues

Now we will place these fields onto the layout:



Sample Single Group By Report

Notice how we supplied the field to group by as **Product** and then set up three queries to include. Of course, these are the three summary reports we set up earlier in the example. For this example, we also set up some additional header rows as shown on the screenshots. If we save this, then include into a container report, and run the container report, we will see results similar to this:

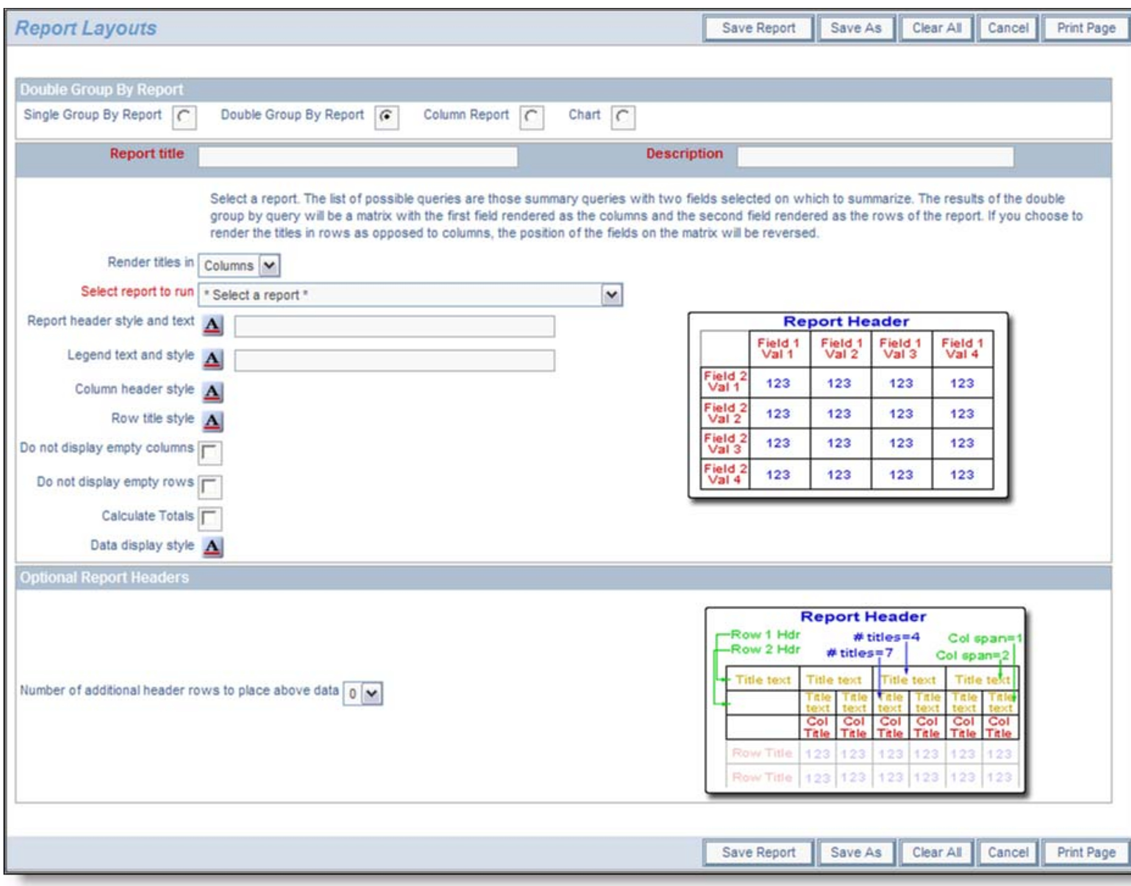
Grouping of Status Reports Sample Report				
Grouping different status reports together				
Header over 2 Columns		3rd Column	4th Column	
	Tracker	Tracker Enterprise	Tracker Lite	Total
Open Issues	2	1	1	4
Fixed Issues	21	7	3	31
Closed Issues	3	4	3	10
Total	26	12	7	45

Sample Single Group By Report

Double Group By Layouts

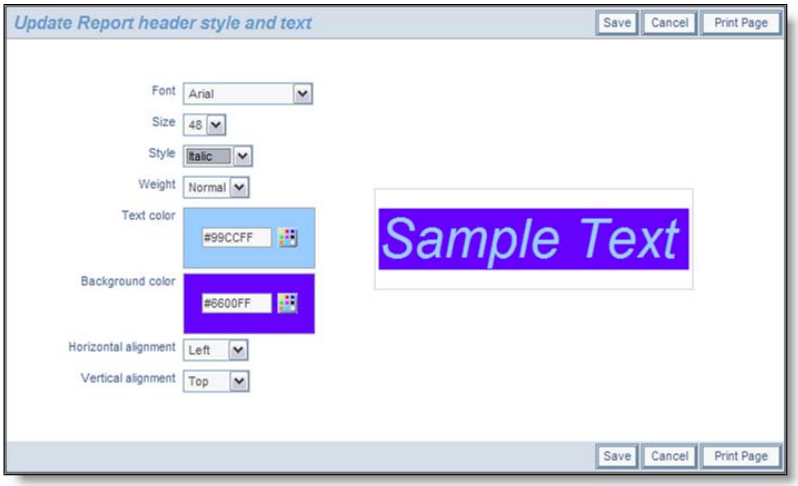
Double group by layouts are prepared by first designing a summary field, with two fields selected as the object of the summary list. For example, you may prepare a Summary report using the **Assigned to** and the **Product** fields. Any filters may be applied to this report.

To prepare a Double Group By layout report, choose the **Create layouts for existing reports** from the **Query / Report Options** list and press the **GO** button. After pressing the radio button **Double Group By Report** at the top of the screen, you will see the following:



Preparing a double group by report

To prepare the report:

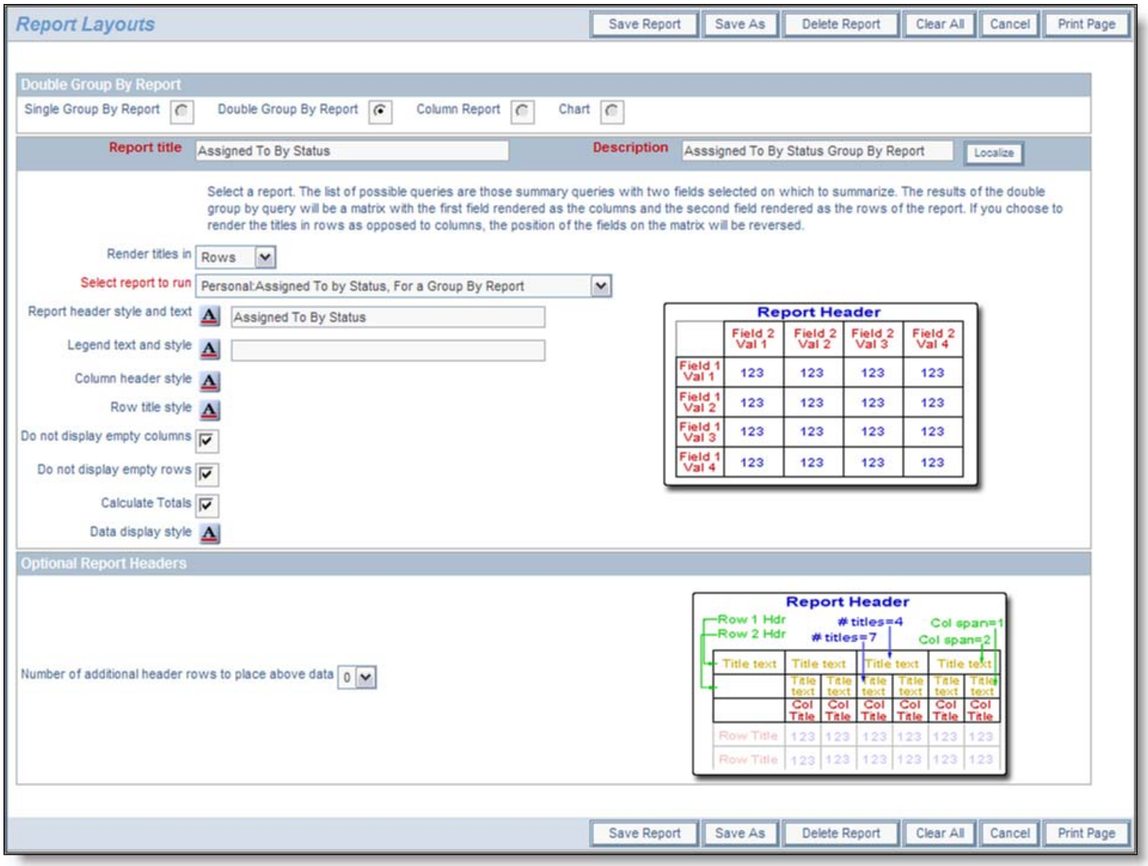


Setting the style of an element on a PDF report

- There are options in the form of checkboxes that allow you to suppress empty columns and empty rows on the report output
- Next there is an option that you can check to automatically compute totals for the report. If you turn this on, then totals for both the rows and the columns of the report will be generated
- You are able to create complex, multi-line headers above the columns of data, using the capability in the **Optional Report Headers** section. You define the number of header rows, and then for each row you can define how many individual headers you require, and how many columns each of these will span. Please be careful to calculate these numbers accurately, as ExtraView does no checking and incorrect calculations will lead to strange-looking results. The diagram on the screen shows how the optional headers will appear
- When you have completed the screen, **Save** the report. Note that you cannot run the report directly; it must first be placed in a container report before you can run it and output it to a PDF.

Example Double Group By Report

First create and save a summary report. For our example, we create a Summary report with both **Assigned To** and **Status** selected. Now we will place this report onto the layout:



Sample Double Group By Report

Notice how we supplied the report to run as *Assigned To by Status* as the report to group the results in a matrix form. If we add total, and some style information, then save the report, then include into a container report, and run the container report, we will see results similar to this:

Sample Double Group By Report

Assigned To By Status

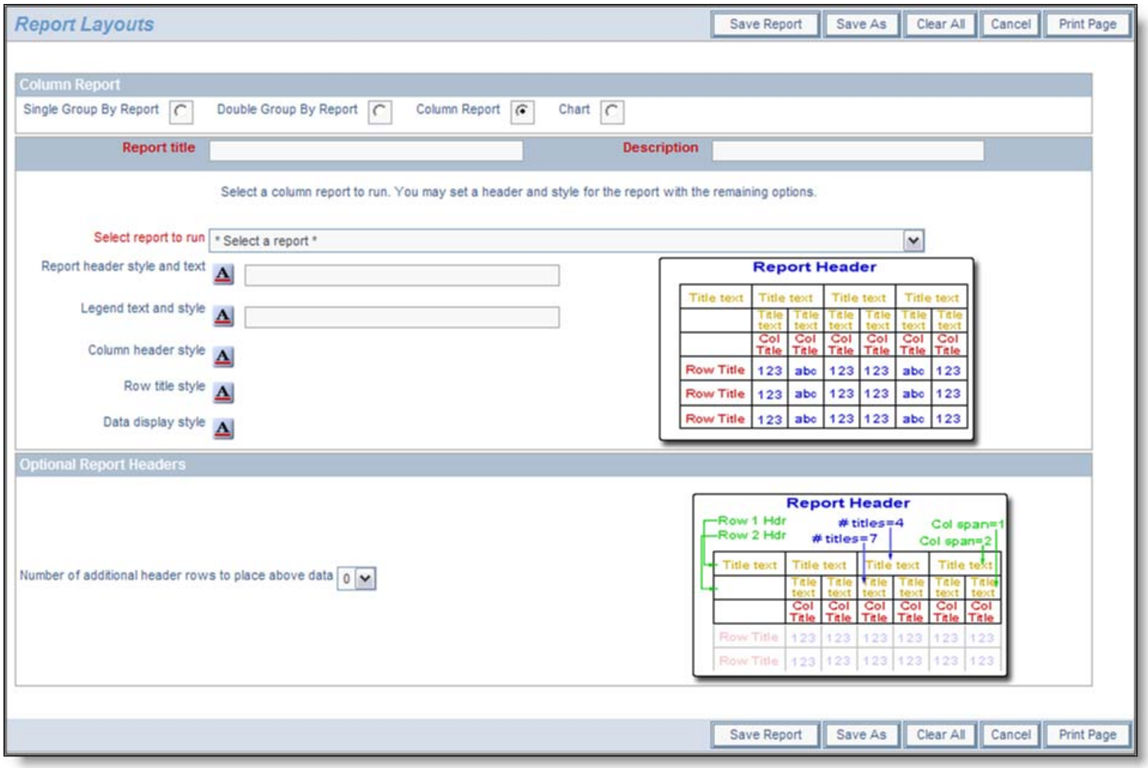
	New	Open	Fixed	Closed	Duplicate	Not Found	Total
Bill Smith	1	2	24	4	1		32
Chris Robinson	2		1				3
George Miller		1	2	2		1	6
Greg Goldberg			3	1		1	5
Jimmy Duncan	6		10	6	1	5	28
Mary Brown	2	2	2	2			8
Mary Dickens			3				3
Sally Hunt			4				4
SCM Daemon			1				1
Susan Green	1		11	12	5	1	30
-	4		1				5
Total	16	5	62	27	7	8	125

Sample Double Group By Report

Column Reports as Layouts

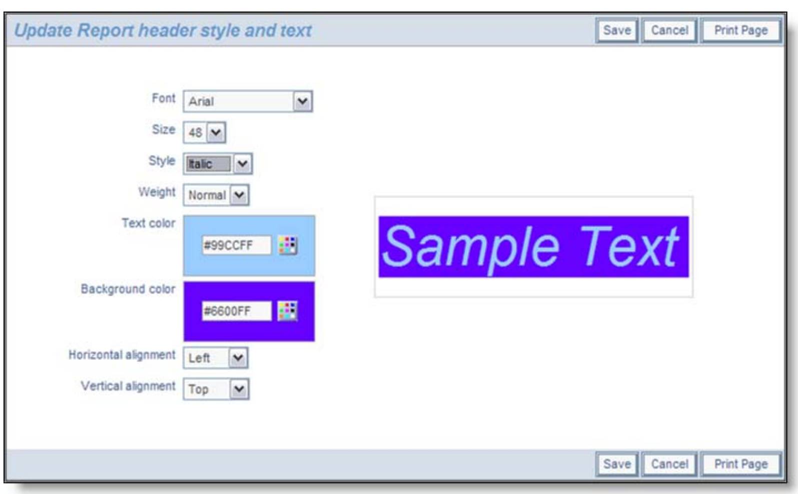
Column reports as layouts are prepared by first designing the column report. The column report is any column report that you create, with any filters.

To prepare a Column layout report, choose the **Create layouts for existing reports** from the **Query / Report Options** list and press the **GO** button. After pressing the radio button **Column Report** at the top of the screen, you will see the following:



Preparing a column layout

To prepare the report:



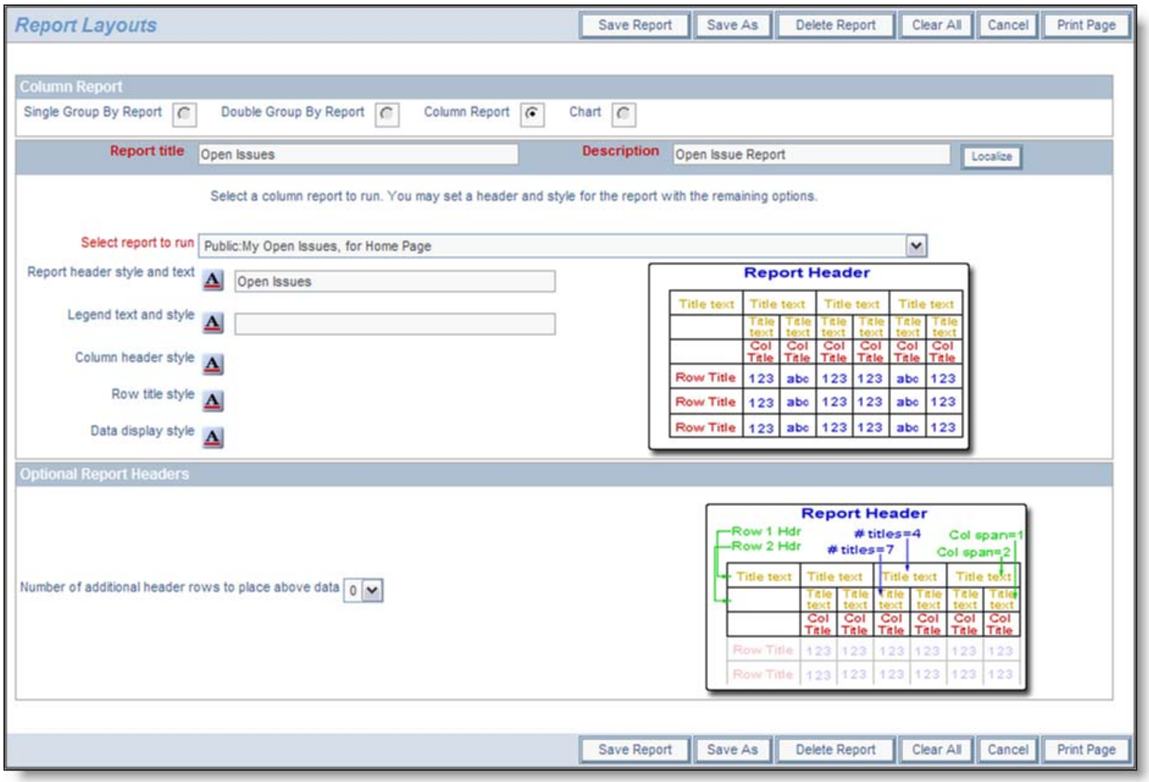
Setting the style of an element on a PDF report

- You are able to create complex, multi-line headers above the columns of data, using the capability in the **Optional Report Headers** section. You define the number of header rows, and then for each row you can define how many individual headers you require, and how many columns each of these will span. Please be careful to calculate these numbers accurately, as ExtraView does no checking and incorrect calculations will lead to strange-looking results. The diagram on the screen shows how the optional headers will appear.

- When you have completed the screen, **Save** the report. Note that you cannot run the report directly; it must first be placed in a container report before you can run it and output it to a PDF.

Example Column Layout

First create and save a column report. For our example, we created a Column report with several fields. Now we will place this report onto the layout:



Sample Column Layout

Note that we simply used the style buttons to embellish the column report output to the PDF. As a result, it looks like the following sample report.

Open Issues

As of 6/12/2007

Open Issues

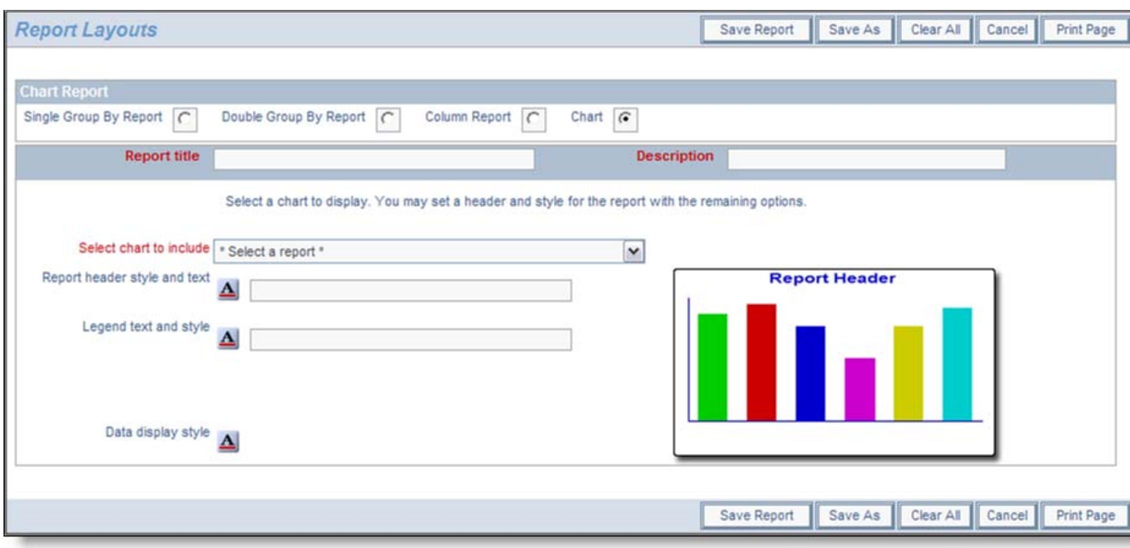
ID #	Business Area	Product	Module	Last Modified	Priority	Severity	Title
10529	Helpdesk	Tracker		6/27/07 10:01 AM	P 3	Low	Authorization to provide a new computer for new employee - Tom Hogye
10525	Helpdesk	Tracker		6/27/07 10:02 AM	P 3	Medium	Authorization to provide a new computer for new employee - Frank Bell
10516	Helpdesk	Tracker		6/27/07 10:02 AM	P 3	Medium	Authorization to provide a new computer for new employee - Gloria Menendez
10297	Bugs	Tracker Enterprise	Processor	4/10/07 3:28 PM	P 3	Low	This is a fault with the Processor module
10475	Bugs	Tracker Enterprise	GUI	6/27/07 10:02 AM	P 4	Medium	This is a Coca-Cola issue reported by the customer when they were performing research into aissue #23232
10353	Customer Issues	Tracker	Processor	4/16/07 11:53 AM			Need to know how exclusive or's are processed internally

Sample Column Report

Charts as Layouts

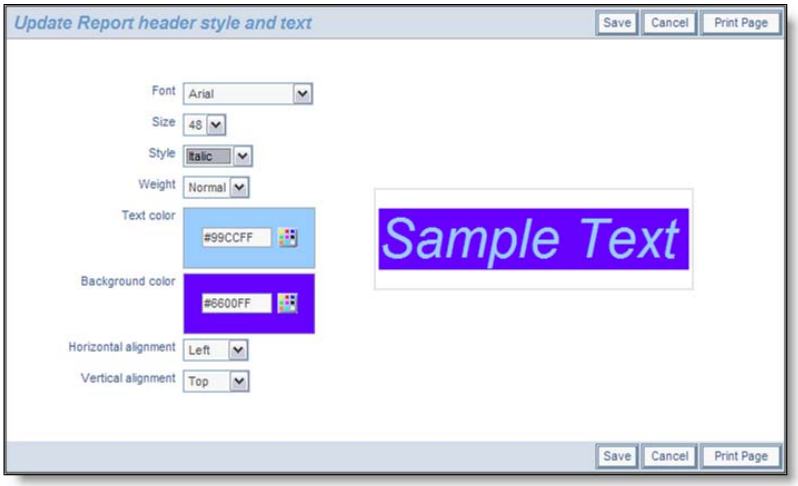
Charts as layouts are prepared by first designing the chart in the standard way as explained in this documentation section. The chart is any that you create, with any filters.

To prepare a chart layout, choose the **Create layouts for existing reports** from the **Query / Report Options** list and press the **GO** button. After pressing the radio button **Chart** at the top of the screen, you will see the following:



Preparing a chart layout

To prepare the report:

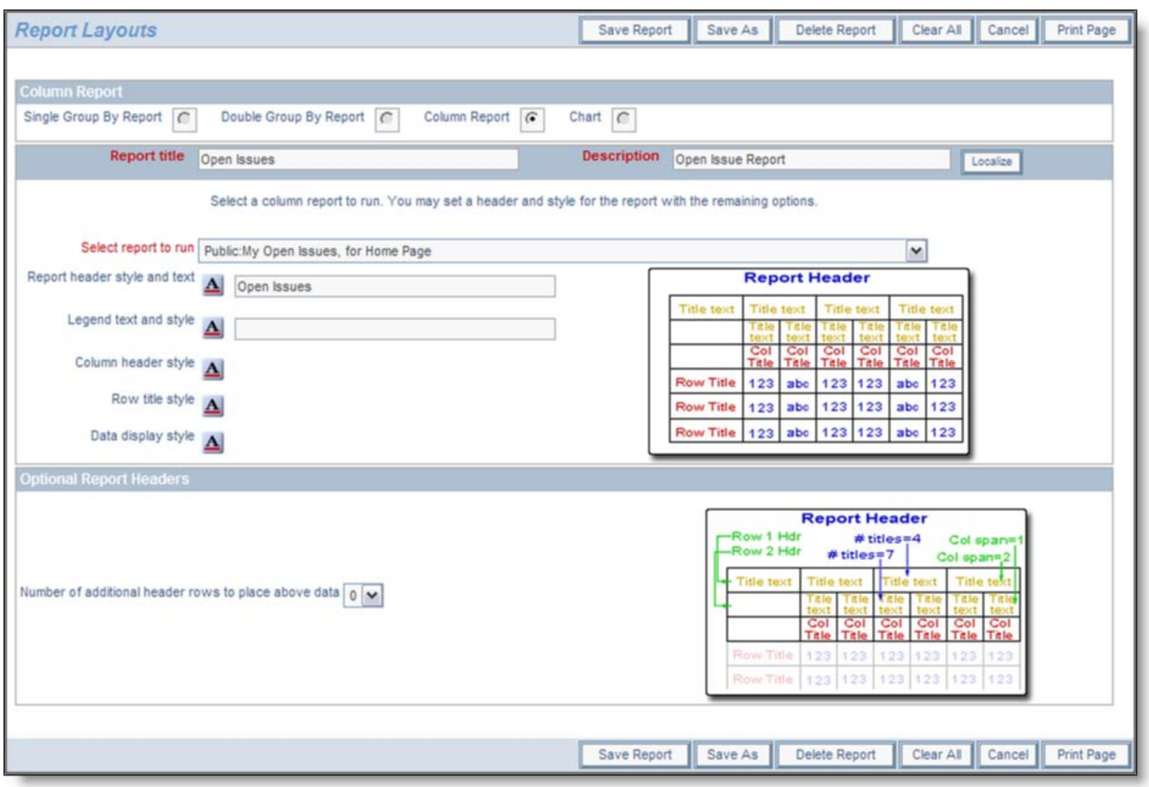


Setting the style of an element on a PDF report

- When you have completed the screen, **Save** the report. Note that you cannot run the chart directly; it must first be placed in a container report before you can run it and output it to a PDF.

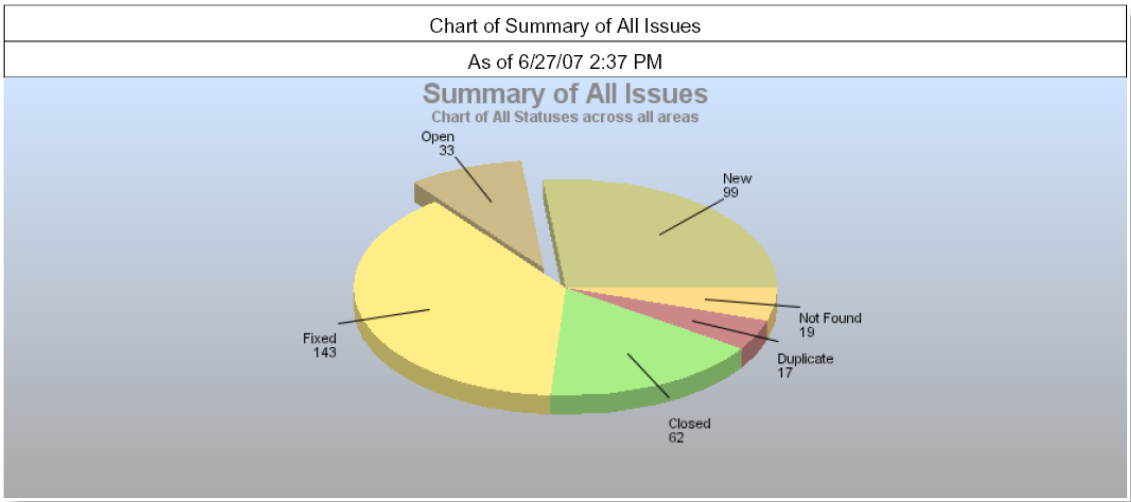
Example Chart Layout

First create and save a chart. For our example, we created a pie chart with the title of **My Open Issues**. Then we place this chart onto the layout:



Sample Chart Layout

Note that we simply used the style buttons to embellish the column report output to the PDF. As a result, it looks like the following sample report.



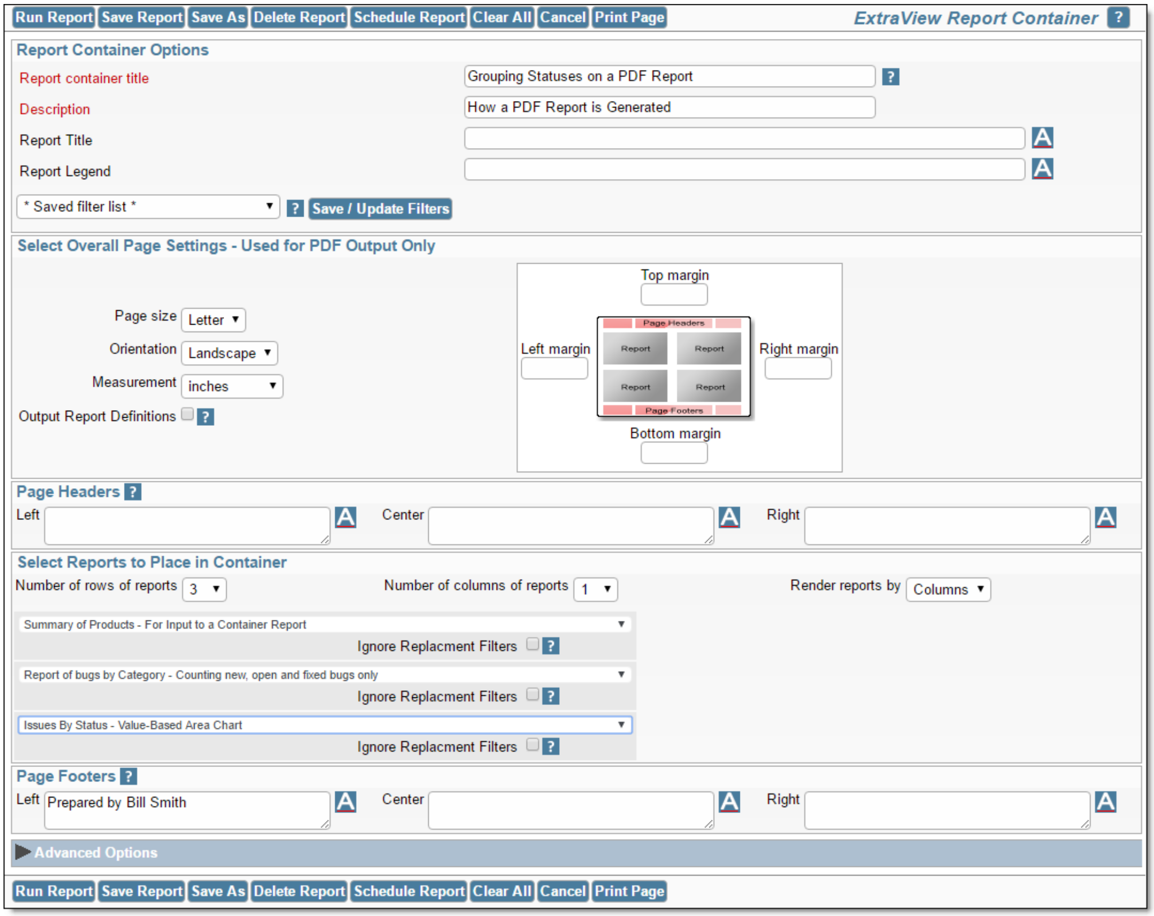
Sample Chart as a PDF

Creating the Container Report

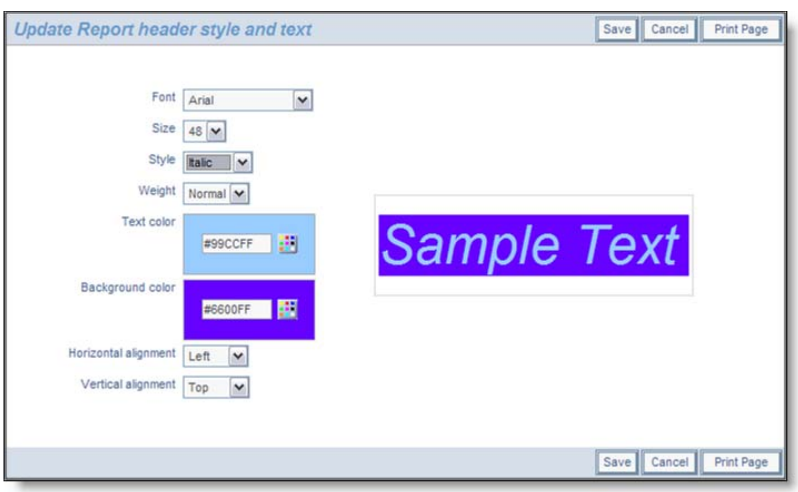
The objective a container report is to take one or more saved reports or layouts for existing reports, and combine them together on a single PDF as the output.

Saved reports are placed directly into the Container report. Layouts for existing reports are used to embellish a saved report before placing these within the Container report. For most purposes, placing the report directly within the Container provides clear and consistent presentation. The layouts allow the addition of styling information, enhanced headers and the ability to combine the output of dissimilar summary reports into a single layout.

When you select the **Create new container for existing reports** option from the **Report** screen, you will see a screen similar to the following:



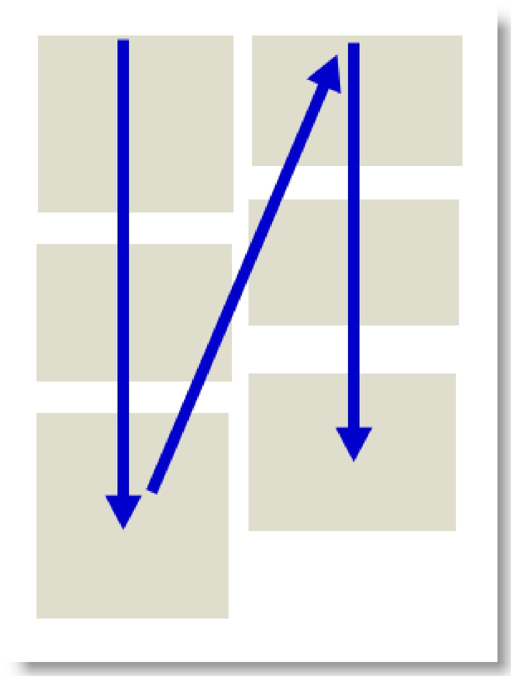
Report Container Screen



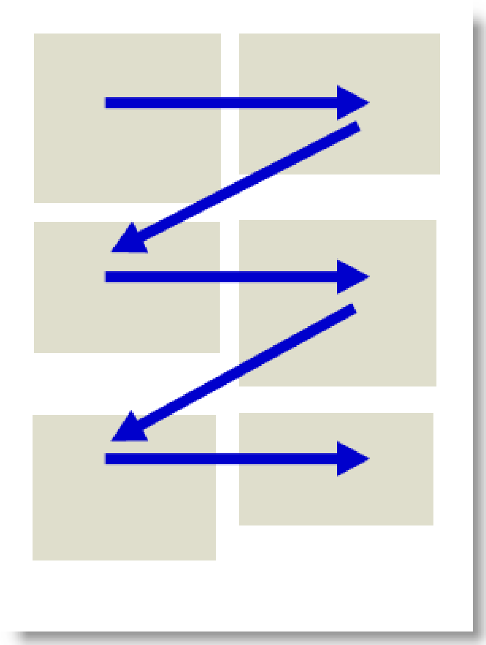
Setting the style of an element on a PDF report

- There is a button to the right of the **Report Container Title** that appears when you are editing an existing report. When you place your mouse over this button, you will see who created the report, who last updated the report and the dates when these actions occured. This is most useful for managing public reports
- The *** Saved filter list *** allows for the selection of filters to modify the replacement filters beneath the **Advanced Options** fold towards the bottom of the screen

- Within the **Overall Page Settings**, you can select the paper size, the orientation and the select from *inches* or *centimeters* as the measurement. Using this measurement, you may also set top, left, right and bottom margins of the PDF you will create.
- The **Page Headers** and the **Page Footers** allow you to set text and styles for the PDF headers and footers
- If you want to place the page number on a header or footer, use the tag $$PAGE_NUM$$. The full list of tags you can include within your titles, headers and footers is explained in the section Substitutable Field Values later on this page
- You can insert a line break into a header or footer with a
 tag
- In the section **Select Reports to Place in Container**, you first set how many reports across and how many reports down the page you want to render. These may be rendered by column or by row, giving a different layout on the PDF. Most of the individual reports within a Container use filters. At this time, it is important that all the individual reports use either standard or advanced filters only. You may not mix these within a single Container report



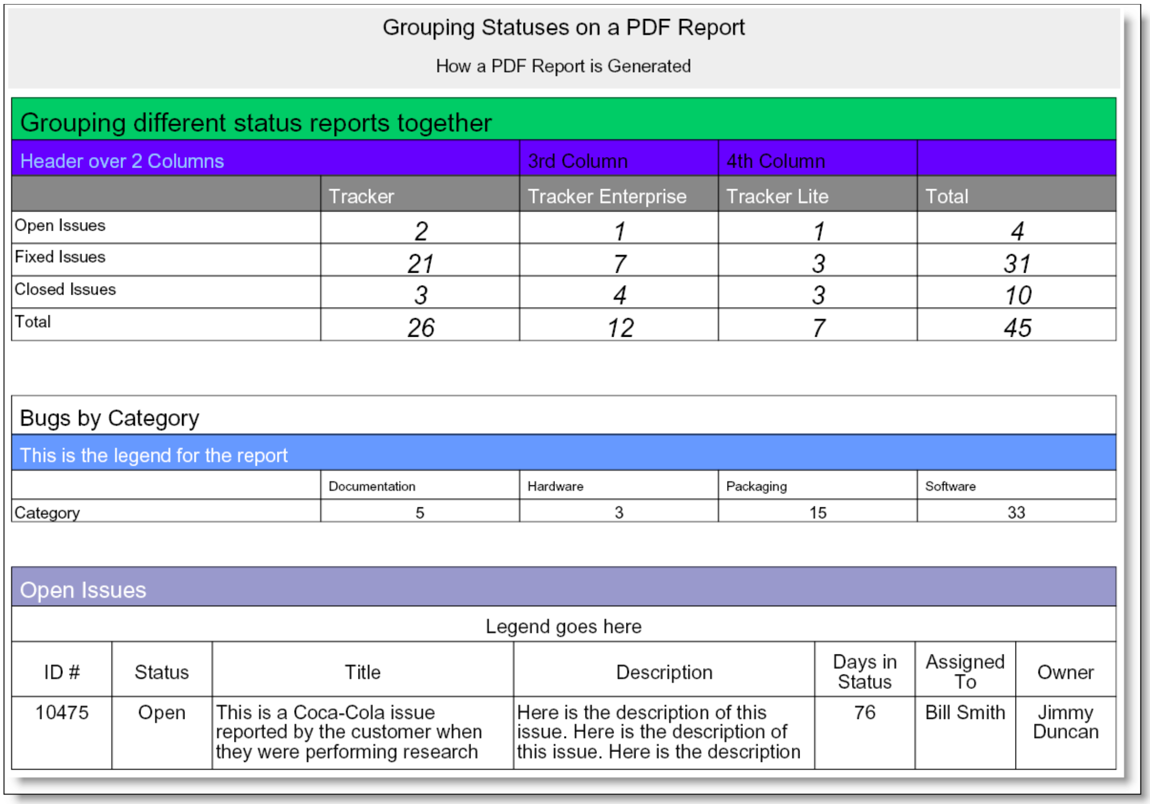
Rendering by column



Rendering by row

Note how the top of each report in the container is aligned according to whether you are rendering by column or by row. The number of selection boxes will change according to how many rows and columns of reports you will include in the container. Simply select the report you want to place at the appropriate place in the container

- You may place up to 100 reports within columns within the report, with a maximum of 3 columns being displayed
- An example of the Container report output may look something like this:



Grouping Statuses on a PDF Report

How a PDF Report is Generated

Grouping different status reports together				
Header over 2 Columns		3rd Column	4th Column	
	Tracker	Tracker Enterprise	Tracker Lite	Total
Open Issues	2	1	1	4
Fixed Issues	21	7	3	31
Closed Issues	3	4	3	10
Total	26	12	7	45

Bugs by Category				
This is the legend for the report				
	Documentation	Hardware	Packaging	Software
Category	5	3	15	33

Open Issues

Legend goes here

ID #	Status	Title	Description	Days in Status	Assigned To	Owner
10475	Open	This is a Coca-Cola issue reported by the customer when they were performing research	Here is the description of this issue. Here is the description of this issue. Here is the description	76	Bill Smith	Jimmy Duncan

Sample Container report output as a PDF

Note: When you output a report to a PDF, and you see the message "**ERROR:Infinite table loop**", this indicates that there is too much data to fit horizontally on the output page. The most likely solution is to reduce the number of columns you are trying to place on the output page, or to reduce the font size of the output.

Substitutable Field Values

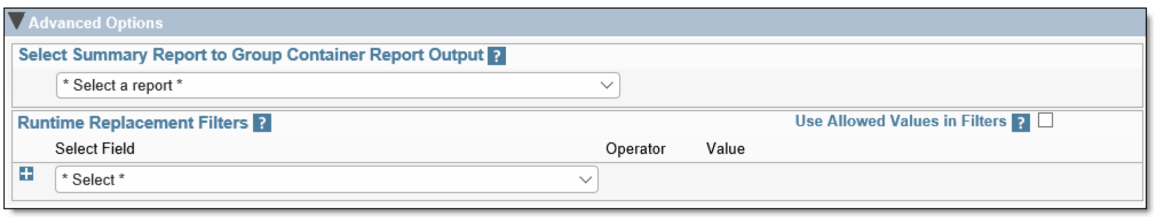
It is often useful to be able to substitute a value in the header, footer or legend of a Container report with the current value from the report. For example, you might prepare a report for a Product that is chosen at runtime, or you might want to put the current date onto the report metadata. To achieve this, you can use tokens, of the form $$FIELD_NAME$$ within the container report legend, footer or headers. There are several built-in tokens that you may use, as follows:

$$*field_name*$$	The value of the filter with the field name of *field_name*
$$SYSDAY$$	The current date
$$SYSDATE$$	The current date and time
$$PAGE_NUM$$	The current page number of the report
$$NUM_PAGES$$	The total number of pages in the report

$$HTML:<img src="http://www.site.com/image.png" width=xx height=yy>$$	This inserts an image that exists at the URL you specify into the output, with a width of xx and a height of yy
$$REPORT_ID$$	The report ID of the report, as stored in the database
$$CONFIDENTIALITY_MESSAGE$$	The value of the behavior setting named CONFIDENTIALITY_MESSAGE
$$USER$$	The name of the user creating the report

Advanced Options

When you click on this fold, you will see the following:



Advanced Options

The **Select Summary Report to Group Container Report Output** option allows you to choose a saved summary report for a special purpose. ExtraView will take each row of this report and use it as input to the Container report as a runtime replacement filter, generating a copy of the container report for the list value returned in each row of the Summary report.

For example, you might want to prepare a container report which contains the same report numerous times, but using a different *Product* for each iteration of the report. If the Summary report returns 10 rows for 10 different products, then the Container report output will contain 10 sub-reports, each one filtered by a different *Product*.

Runtime Replacement Filters

Setting runtime replacement query filters on Container reports allow you to apply these filters to all the individual reports configured within the Container report. For example, you might want to apply the same date range to all the reports, or to select a single report as a filter for all the reports. Note that if any of the reports contain a filter on a field used as a runtime replacement filter, then the filter at the individual report level is dropped completely and replaced with the runtime replacement filter for the field.

For example, you might want to apply a runtime replacement filter that applies the same date range to all the output, or apply a filter that provides only results from a specific product within the output.

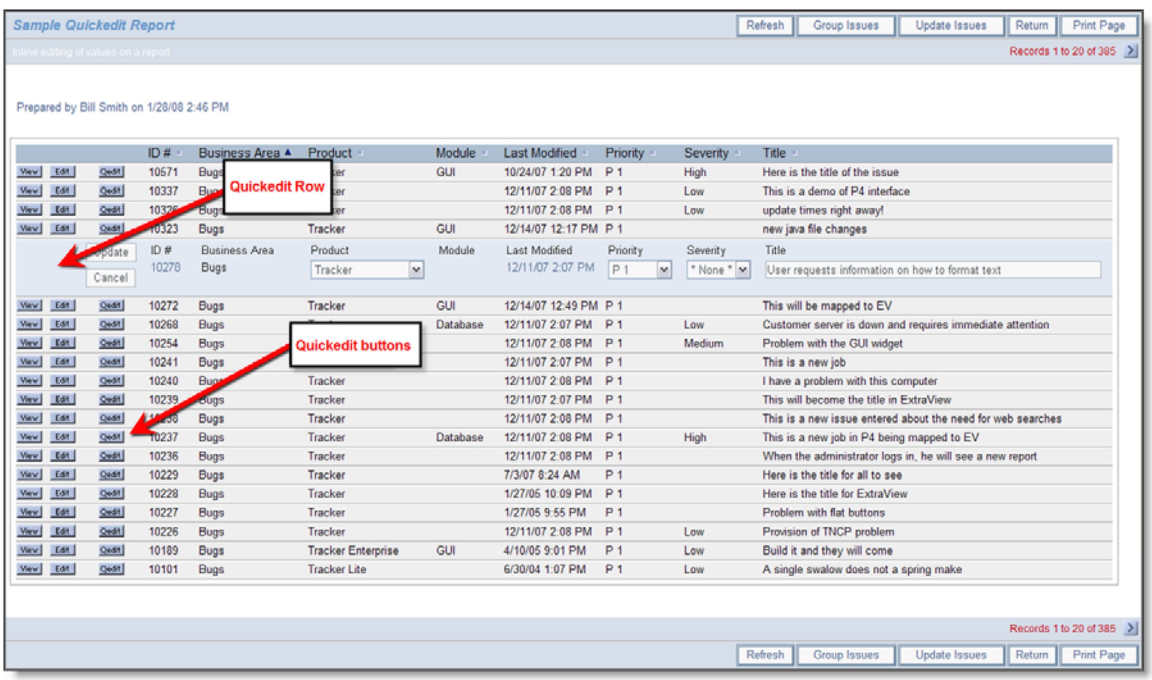
When you specify runtime replacement filters within a Container report, they will replace filters for the same field within the individual reports that they contain. If a filter on a field specified at the Container level does not appear within the contained report, it will have no effect. Further, it is not possible to specify conjunctions for the runtime replacement filters - they simply replace filters for the same field within the contained reports. The runtime replacement filters are always displayed in expanded mode, allowing you to make multiple selections within a field.

Tip: A typical use case might be to create a Container report that contains several reports about all your products, but you want to filter on the report output by a single product. You cannot select a runtime replacement filter with a value similar to *Product = Any*, but you can select all the product values in the list and store that as your filter. Then, after viewing the Container report, you can select a new filter value that is either just one, or a selection of products.

For each report you select to display within the Container, there is a checkbox option, **Ignore Replacement Filters**. When selected, the replacement filters will not be used to prepare this report. This allows some reports to use, and some not to use, the replacement filters.

Quickedit Mode - Direct Inline Editing

A button with the label **Qedit** or similar may appear on columnar reports and on Quicklist reports. This is the report Quickedit mode. When this is pressed, you can edit the record on the report directly. This is a very fast and efficient means of updating many records in succession. For example, if you have a weekly status meeting where you review many issues and make changes to details such as priorities and who an issue is assigned to, then the Quickedit mode is very useful.



Report Quickedit mode

When you press the **Qedit** button, you are able to edit the fields that appear on that row of the report. This is often much speedier than going into the edit mode of the issue. When you are in the

Quickedit mode, you must exit by either updating the issue, or canceling the update. There are some caveats using the Quickedit function, as follows:

- You must have write access to a field in order to update its value
- The administrator must have placed the field on the edit layout for the appropriate business area and project in order to update its value. If the field is part of the issue and not on the layout, you may still see it in a read-only mode
- If you see '–' where you expected to see a field you wanted to edit, it is because the field is not an ExtraView built-in field and it has not been placed on the *edit* screen layout by your administrator. This happens when you are currently sitting in one Business Area, but the record you are trying to edit resides in a different Business Area or Project, and does not have that field
- Calculated fields such as **Days Open** and **Days in Status** will be displayed as read-only
- If a field has a link, using the "Display as URL" function, this link is not active when in Quickedit mode
- You cannot ever edit the Business Area or the Project field in Quickedit mode
- If you are using repeating rows, you may edit the values on a row, but you cannot add a new row
- All allowed value relationships are maintained. However, if the parent value is not on the report, you may only select a new child value within the current parent value
- Quickedit mode does not operate within a report displaying the results of a hierarchical report. This is because these reports display multiple issues on a single row
- All business rules will be executed in the same way as if you were using the full edit mode on the issue. This means that if your edit in Quickedit mode triggers a rule that makes a field required, and this field is not on the report, then a popup window will appear and ask you to complete the missing value. It is not possible to bypass the rule and update the issue. If there is a "chain" of required fields, within one being dependent upon another, then you may see more than one popup window until you satisfy all the rules
- If you have any image or document display type fields on your report that are subject to being visible or required according to a condition on its *edit* layout, then the report cannot be used with Quickedit. Under this circumstance, you will see a dialog box that informs you that you should use the normal edit mode.
- All issue notifications will be sent out as normal.

Calculated Fields

Not every filter that can be used or field that can be displayed is a field with data explicitly entered or updated by the user. For example, ExtraView will automatically calculate the values for fields defined internally. These fields and their meanings are:

Field Name	Default Title	Purpose
DATE_CLOSED	Date Closed	The date and time the issue was closed.
DATE_CLOSED_MONTH		The month the issue was closed (useful when summarizing information)

	Date Closed Month	
DATE_CLOSED_SINCE	Days Since Closed	The number of days since the issue was closed. Days are calculated using your own time zone, back to midnight for the first day (this is zero days since closed) and then incremented by one for each further day back in time that you go
DATE_CLOSED_WEEK	Date Closed Week	The week the issue was closed
DATE_CLOSED_YEAR	Date Closed Year	The year the issue was closed
DATE_CREATED	Day Created	The date and time the issue was created.
DATE_CREATED _MONTH	Month Created	The month the issue was created (useful when summarizing information)
DATE_CREATED _SINCE	Days Since Created	The number of days since the issue was created. Days are calculated using your own time zone, back to midnight for the first day (this is zero days since created) and then incremented by one for each further day back in time that you go
DATE_CREATED_TRUNC	Created	The date the issue was created
DATE_CREATED _WEEK	Week Created	The week the issue was created
DATE_CREATED _YEAR	Year Created	The year the issue was created
DATE_LAST_STATUS_CHANGE	Date of Last Status Change	The date and time of the last status change
DATE_LAST_STATUS_ CHANGE_SINCE	Days Since Last Status Change	The number of days since the last status change. Days are calculated using your own time zone, back to midnight for the first day (this is zero days since the last status change) and then incremented by one for each further day back in time that you go
DAYS_IN_STATUS		

	Days in Status	The number of days the issue has remained in its current status
DAYS_OPEN	Days Open	The number of days since the issue was created until it was placed in a *Closed* status.
EV_TOP_RANK	Top-n rank filter	This field only applies to summary reports. When it is applied, you enter a positive number. For example, if you enter 10, then the results displayed will only contain the ten results with the highest values. This is useful if you want to provide a summary count of issues where there are many rows returned, but only those with the highest *n* count may have useful data. Note that this feature is not supported on all databases. If your installation is utilizing MySQL as its underlying database, then this feature is inoperable.
MONTHS_IN_STATUS	Months in Status	The number of months (defined as 30-day periods) that the issue has been in its present status
MONTHS_OPEN	Months Open	The number of days since the issue was created until it was placed in a *Closed* status.
START_DATE	Created Start Date	Used as a filter to determine the created day from which to start counting issues
START_UPDATE	Updated Start Date	Used as a filter to determine the last day modified from which to start counting issues
STOP_DATE	Created Stop Date	Used as a filter to determine the created day to which you want to count issues
STOP_UPDATE	Updated Stop Date	Used as a filter to determine the last day modified to which you want to count issues
TIMESTAMP	Last Modified	The day and time an issue was last modified
TIMESTAMP_DAY	Day Last Modified	The day an issue was last modified
TIMESTAMP_MONTH	Month Last Modified	The month an issue was last modified
TIMESTAMP_SINCE	Days Since Last Modified	The number of days since an issue was last modified. Days are calculated using your own time zone, back to midnight for the first day (this is zero days since last modified) and

		then incremented by one for each further day back in time that you go
TIMESTAMP_TRUNC	Last Modified	The day an issue was last modified
TIMESTAMP_WEEK	Week Last Modified	The week an issue was last updated
TIMESTAMP_YEAR	Year Last Modified	The year an issue was last updated
WEEKS_IN_STATUS	Weeks In Status	The number of weeks an issue has remained in its present status
WEEKS_OPEN	Weeks Open	The number of weeks since an issue was created until it was placed in a *Closed* status.

Date Fields as Filters

When you use a field with a display type of **date** as a query filter, ExtraView will assume that the date has a time of midnight of the day selected. Your filter is set at the beginning of the day, not at the end. This may have an effect on the results within your report. At the same time, you should remember that this time is midnight for your own time zone. If different users have created and updated issues in different time zones, it is entirely possible (indeed probable) that the list of issues created or updated within your day is different than the list of issues created or updated within a different user's time zone.

Also note that if the date format stored within your user settings includes a time component (e.g. if you set *Medium with Time*), then you may see the time component of the date as you create a report or chart, if you use the pop-up calendar. However, the time will not be used when the report is run, or when you save the report.

Simple Arithmetic with Date Field Filters

It is often very useful to prepare reports for periods such as the last week, the last thirty days, or similar. To facilitate this, both **date** and **day** display type fields being used as report filters can utilize simple arithmetic. For example, you might want to prepare a report on all the issues created in the last week. To facilitate this, you would set up an advanced filter like so:

DATE_CREATED between $$SYSDAY$$ - 7 and $$SYSDAY$$

This works equally well using $$SYSDATE$$.

Only simple addition and subtraction work with this capability.

Point in Time Reports

There is a special filter which allows you to produce a report at any point in history. This has the title **Historic data filter** (its name is HIST_RANGE_END). If you choose this as a filter, then the report will be produced as of the data in the ExtraView system as of that point in time. This gives you a powerful mechanism to look back in history at any date.

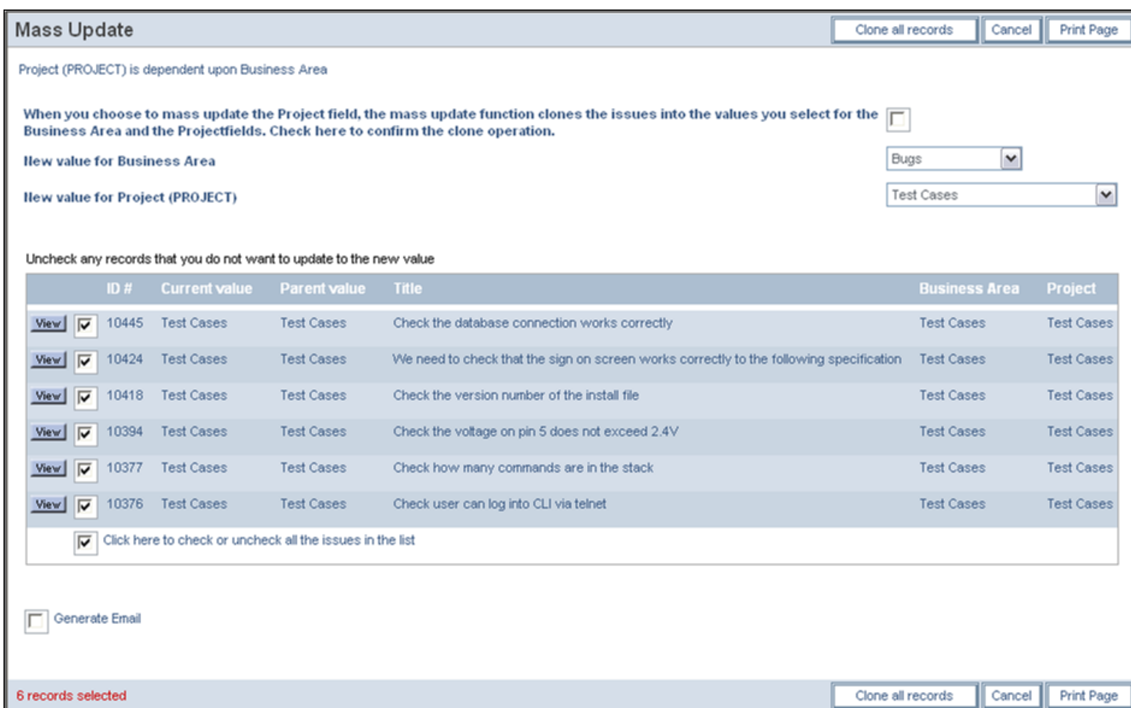
If you are using this filter in the advanced search mode, note that the operator must be **equals** and that only the date in the first date entry field is used.

If the filter is not present, it means your administrator has not given you permission to use this feature.

Cloning Issues from a Report

This procedure only clones issues from one Project in your installation to another Project. The destination project may be within a different Business Area. The operation of this feature is from within the Mass Update facility described in the last section.

Follow the guide in the previous section and select the Project field from the list of available fields to update. Your administrator must have given you permission to write to this field within your current Business Area and Project. When you choose the Project field, you will see a screen similar to the following:



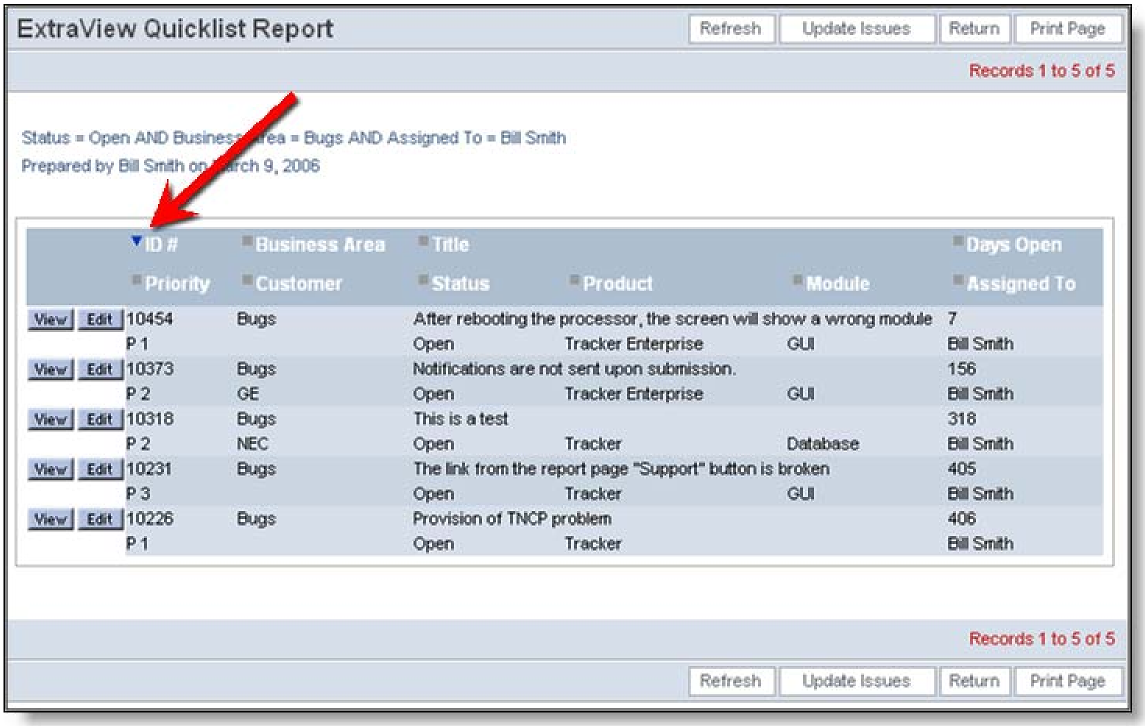
Mass cloning of issues from one Project to another

- You must give your consent to the cloning of the issues displayed before proceeding.

- Select the destination Business Area and Project in which to place the newly created issues
- Proceed by clicking on the **Clone all records** button

Sorting Report Result Columns

You can resort the output from a Quicklist or other report by pressing the title at the head of the column.



Resorting Report Columns

The current sort is shown with an arrow. When you first click on the title, it will resort by that column, in ascending order. If you press the same column label again, the column will be sorted in descending order.

Each time you press a label to resort the report output, the previous sort order is remembered, and becomes a secondary sort within the report.

Not all fields can be sorted, and the ExtraView administrator has the ability to make decisions about which fields can be used for sorting. If you cannot sort a column, there will be no icon besides the column heading, and the heading appears in a different color.

Sorting multi-valued list fields can have results that at first glance do not give the results you expect. First, when you click on a field to sort the results, and then click on a second field to sort by that new field, the original sort order is retained as a secondary sort to the second sort. Now, with multi-valued fields, you will get duplicated rows with sorted values appearing at all the positions where they belong, according to the sort. This is true whether the sort field is the primary sort field or not. A further complication is that when duplicated rows appear adjacently in the report, the second is elided, i.e. you will never see the same row twice together in the report. This can change the number of rows rendered, depending on the sort.

Security Permissions and Reporting

You are only able to view columns and fields on reports that your administrator has given you permission to view. If you are granted permission to view a report that contains individual fields that you do not have permission to view, the restricted fields are dropped from the report.

The behavior is such that not only will you not see fields that you do not have permission to view, but these same fields will be dropped from the report preparation, if they have been used as report filters or summary columns on a Summary report. If you have permission to view a report, but you do not have permission to view any of the fields on the report, ExtraView will offer you a message that tells you that you do not have permission to view the report.

Reports with Repeating Rows

It can sometimes be important to understand the distinction that ExtraView makes between rows on a report and records on a report. This difference in semantics is used to distinguish between the times when ExtraView returns a precise number of records on a report and when it returns a set of ***rows*** that may or may not correspond exactly to the number of records. The difference comes when a query may return a single record multiple times on a report, or count the same record multiple times on the same report. This happens when there are one-to-many relationships within your data and with repeating rows on reports. The two most common times this happens are:

Reporting with Repeating Record Fields

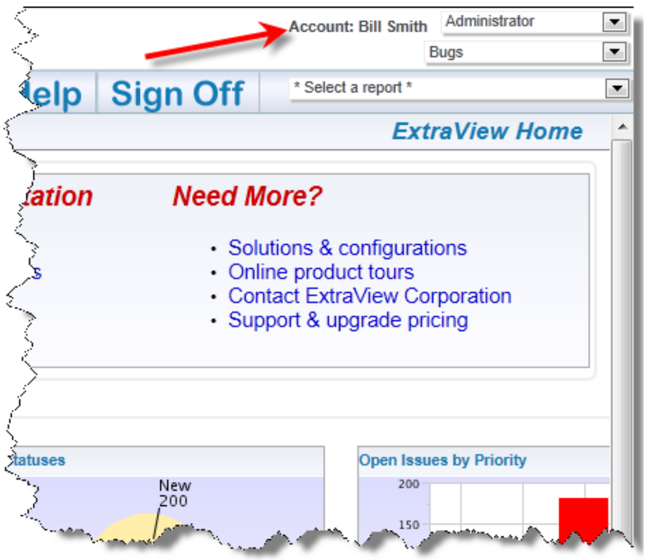
- You prepare a report that uses repeating row records, then use a repeating row field to sort the report. When you use a field on a repeating row record to sort, it will generate a row on the report for each occurrence of the repeating row. Therefore, if you have 3 repeating rows within a single issue, it will generate 3 ***rows*** on the report for each ***record***.
- You use reporting hierarchies. In a similar manner to the above bullet, one record at a level in the hierarchy may have multiple child records, and when you sort by a field at the child level, you will generate one ***row*** on the report for each ***record***.
- If you create a report and want to place any fields from the Release field on the report, you must always include the RELEASE_FOUND field on the report, as this is the key field used to extract the remaining fields from the ExtraView database.

Reports that Include Repeating Row Fields from Different Repeating Row Layout Types

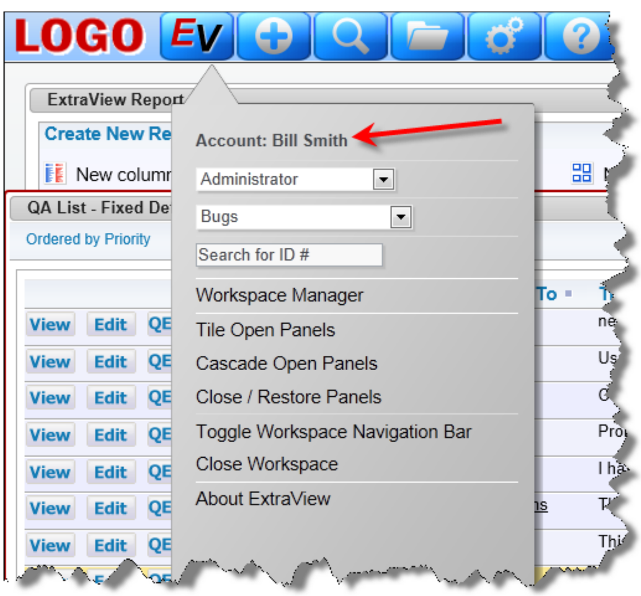
When you have reports that include fields from two or more repeating row types, it can be confusing to view the results from the different layout types aligned on the same row of the report, as the data from any one repeating row record is unlikely to be related to the data from any other repeating row record. Care should be taken when interpreting the data displayed on a report which contains data from multiple repeating row layouts.

Managing your Personal Options

Note that you must have been granted permission by the system administrator to see and update your personal options. If you are using the standard interface, you click on your name in the navigation bar in order to access your personal options:



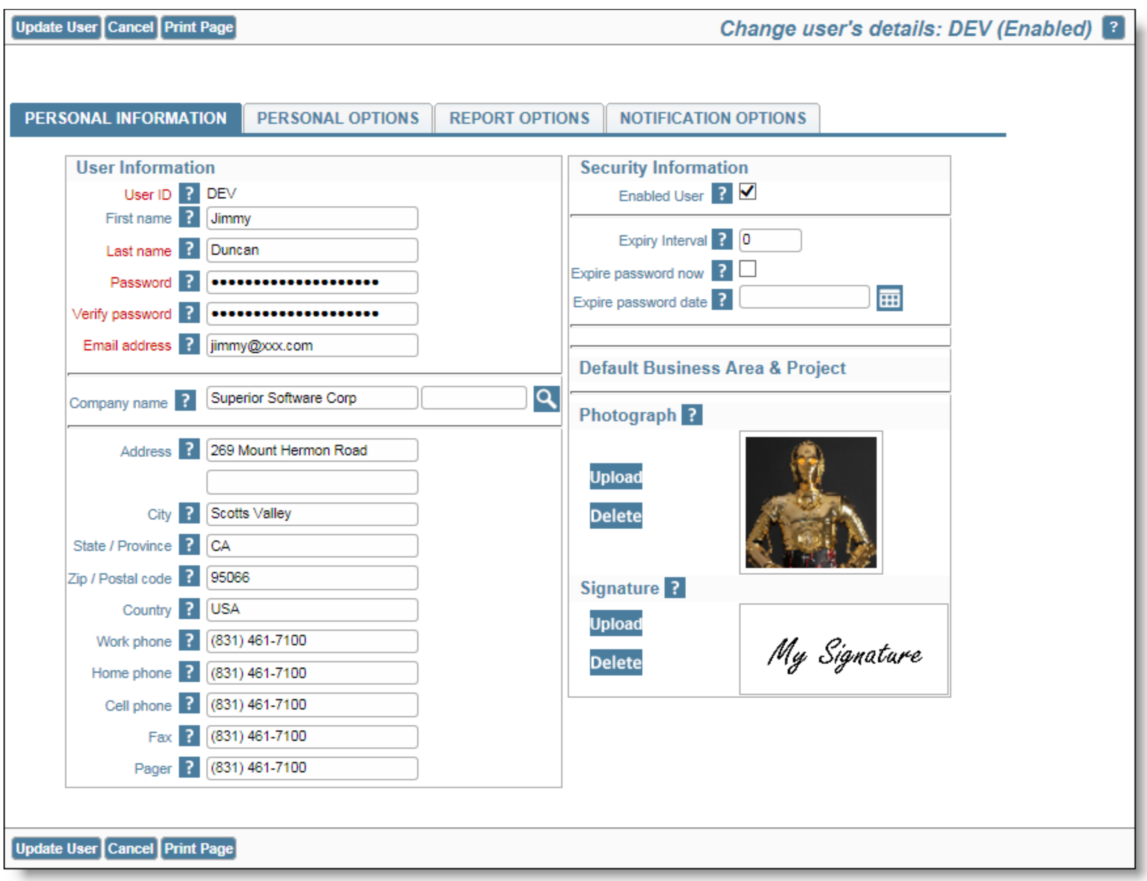
If you are using the workspace interface, you access your personal options from the Home Menu:



You will be asked for your password before gaining access to your personal options.

Personal Information

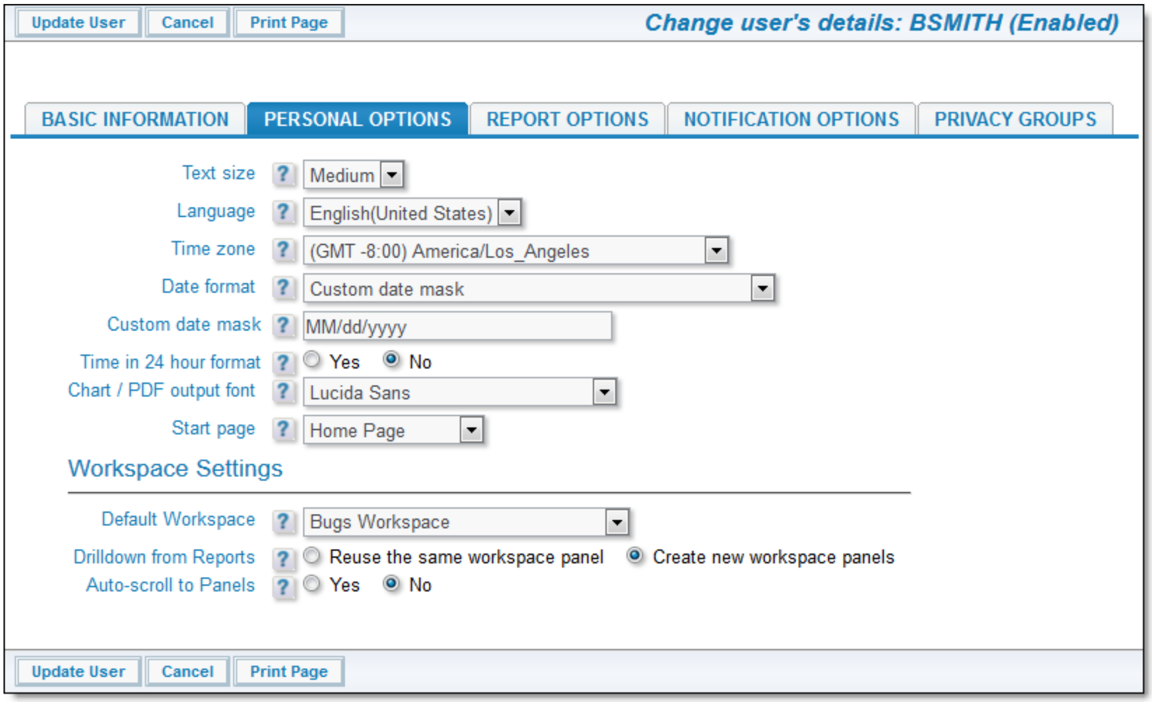
- **User ID** - You may not change your User ID. Once this was created it is a permanent entry into the database
- **Alternative User ID** - You may change your Alternative User ID and use this to sign on to ExtraView, as opposed to using your User ID. Given you are not able to alter your User ID, this provides a convenient mechanism to change your sign on. For example, this can be used to alter your sign on ID when you change your name upon marriage. This field is only visible if your administrator has enabled it
- **Password**
- **First name** and **last name**
- **Password**
- **Email address**
- **Job Title**
- Company name and **address**
- Telephone contact numbers
- Security Information (only displayed with permission)
- Photograph and signature (only displayed with permission)



Personal Details input

Personal Options

- The **text size** within your browser. You can select *small, medium* or *large* fonts for the display. Most users prefer the *small* option
- **Language**. If this prompt is visible, you can alter your language setting to the available languages in the list. When you select a language, this also has the effect of allowing you to select different date formats. For example, if you choose *English (United States)* as opposed to *English (Great Britain)*, the date formats presented to you will be according to the convention of the country. Also, if the language of the country is not English, all dates will be presented in your local language
- **Time zone** to which you belong
- **Date format** to use on display of date fields and an optional date mask to further customize the display of the date. See Appendix A for details of how to set the date mask, if one of the inbuilt date formats is insufficient for your needs
- Selection of **12 or 24 hour format** in which to display the time
- **File Attachment char set**. You can set a default character set for documents you upload. The default for the English language is UTF-8, but you can use other values. For example, in Japan, Shift-JIS is the most likely value for this field. This option will not appear if your administrator has not enable working with some languages
- **Chart font**. This font will be used on charts you prepare.
- **Start Page**. If this option has been made available to you, you can set your start page to be one of the following: Home Page, Search / Report screen, Add Issue, Administration or Workspace. If you select an option to which you do not have permission, you will be directed to the Home Page.
- **Workspace Settings**. If you have been granted permission to utilize workspaces, then you may set some options for this.
    - You can set the default workspace to be loaded when you first enter the workspace feature
    - You can also select whether your personal preference is to minimize the number of Quicklist panels opened when you drill down from reports. You may prefer to keep this number to a minimum, or to create a new panel with each new drilldown
    - You may choose what action that ExtraView takes when you click on a panel within a workspace. The default is that the panel obtains the focus and you work within that. However, you can choose to have ExtraView auto-scroll as much of the panel as it can, into view, from the top left-hand corner of the workspace that's visible. The first choice is better if you do a lot of dragging and dropping of issues between panels, as the panels will remain in their place within your browser. The second choice is better if you work mainly in *add* or *edit* screens, and want to see as much of their contents as possible, when you click on a panel. In both cases, clicking on a panel's icon within the navigation bar, will auto-scroll the viewing area of the workspace to make as much of the panel visible as is possible.

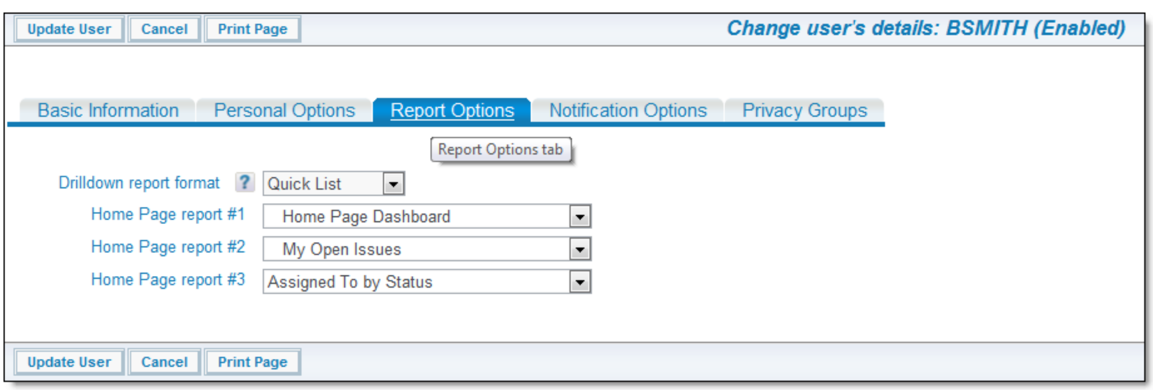


Personal Options input

Report Options

This screen controls the options to access reports for each user.

- **Drilldown Format** (Quicklist or Detailed Report). This offers you an alternative when you drill down from a summary report, to reach the Quicklist or the Detailed Report. See the reporting section of this guide for information on the Quicklist and the Detailed Report
- Choice of up to three reports that are available to you to place on your Home Page. Each report must have been previously saved, and you must have permission to run the report. You may also select these reports directly from the Home Page.

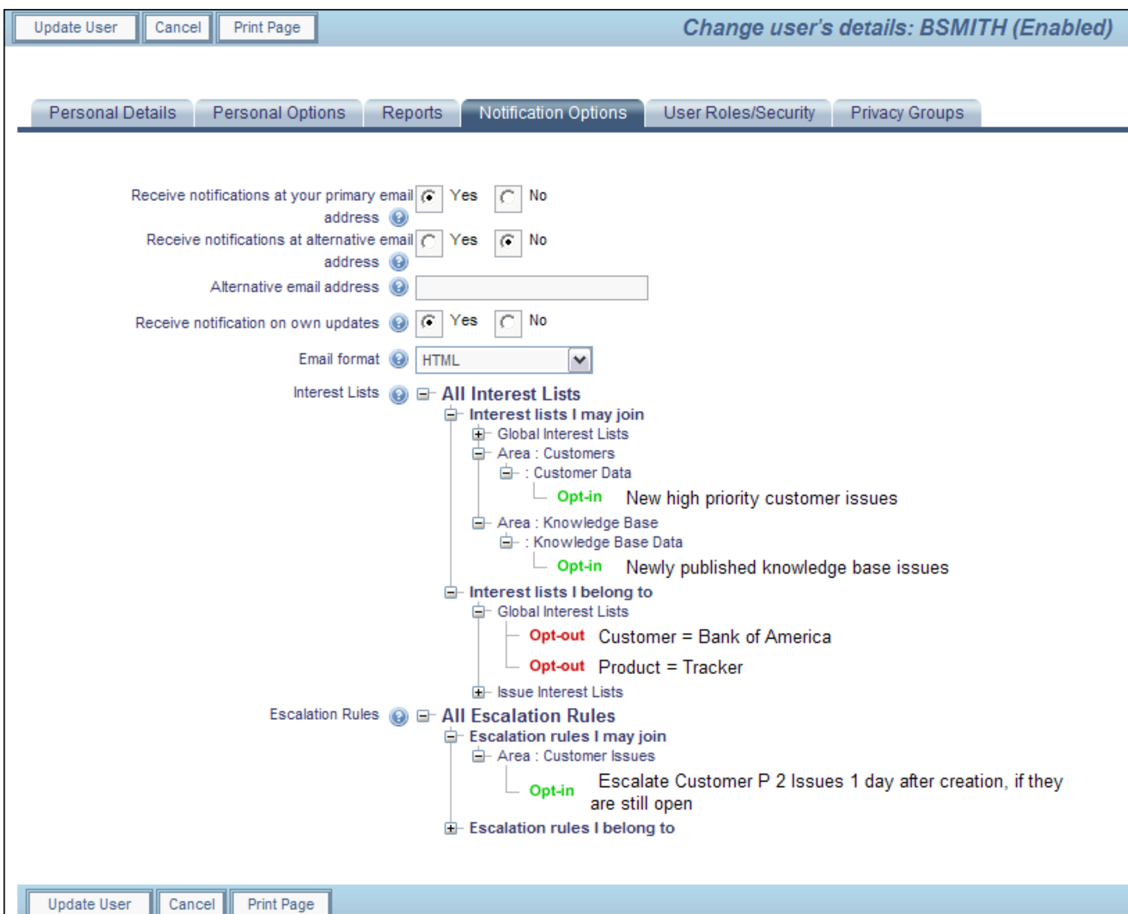


Report Options Input

Notification Options

This section controls the notification of issues to you.

- **Notification Options**. You can turn on and off email notification at your primary email address (entered on the Personal Details tab) and at your alternative email address that you define on this tab. Control of sending notification to each of the addresses is independent.
- **Alternative Email Address** - You can enter an alterative email addres and elect to receive emails at this address
- **Notify on Own Updates**. If you select no for this option, then email notification to yourself will not take place for changes that you initiate
- **Receive Attachments with notifications**. Use this option to suppress incoming attachments with your notifications
- **Email format for notification** – HTML, plain text (full), plain text (brief), or plain text (very brief). The HTML and plain text (full) options will send a notification of all the key fields; the plain text(brief) option displays a smaller set of the fields that changed and the plain text (very brief) displays only the changed fields
- **Interest Lists**. This displays all the interest lists to which you may subscribe. Note that many of these allow you to opt-in or opt-out of the interest list, according to how your administrator defined the interest list. Interest lists are used to notify users when specific values are present in issues, such as notifying an account manager when an issue for one of their customers is updated
- **Escalation Rules** – You can opt-in and opt-out of all escalation rules that your administrator has made eligible for you to join and leave. Escalation rules are used to provide automatic notification to you or other users when specific criteria defined in the escalation rule have been exceeded. For example, issues that have not changed in Open status for more than one week may be escalated.



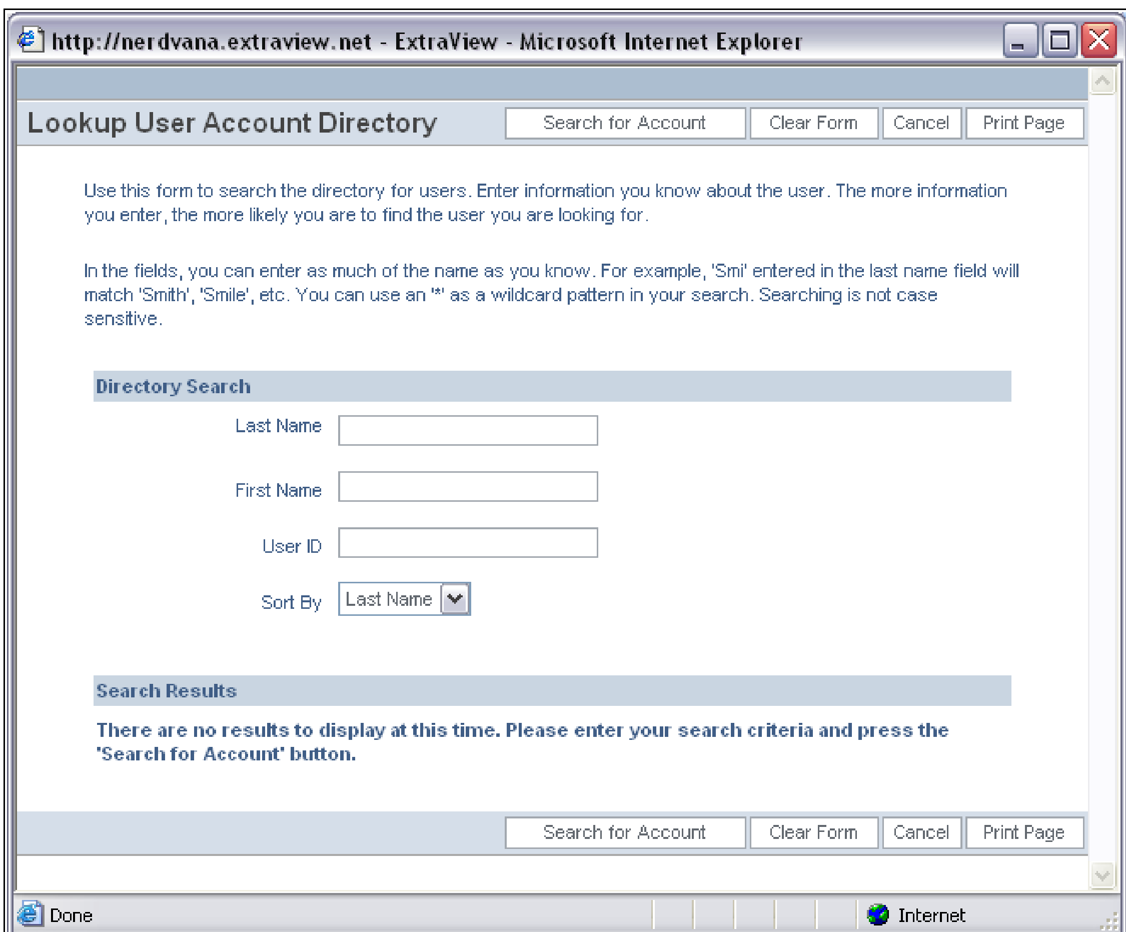
Notification Options input

Editing your personal account options

- On the navigation bar, click on your name
- After entering your password you will be able to change your account options
- Enter or update your data on any of the tabs on the screen
- To save your information, click the Update User button.

External User Directories

An LDAP Server or Active Directory may be used to authenticate users in a centralized fashion for your installation. If your company has enabled this functionality of ExtraView, then searching for users works slightly differently to accommodate the fact that you may be searching through many thousands of entries for the name you seek. If your administrator has set up a central directory, there will always be a “user list” icon by the name field. You can either enter a name in the field and continue, or enter no name in the field, or enter a partial name. When you enter no name or a partial name and click on the “user list” icon, a search form appears, similar to the following screen:

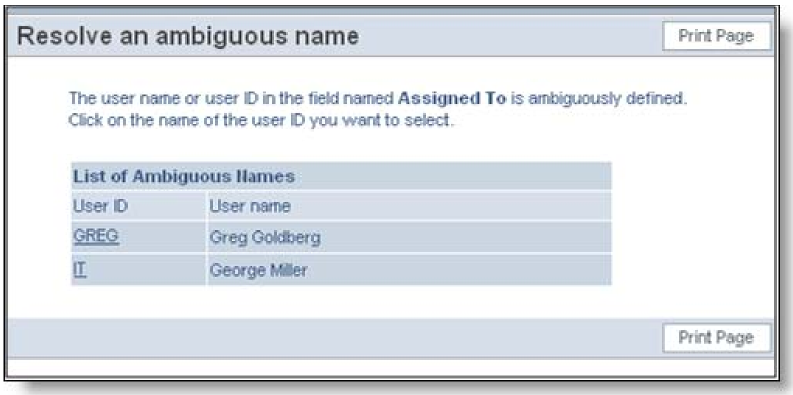


LDAP and Active Directory search form

Use this form to search for the name you want to select. You simply click on the **User ID** of the name you want to select, when the search returns one or more results.

Ambiguous Entries When Searching for Users

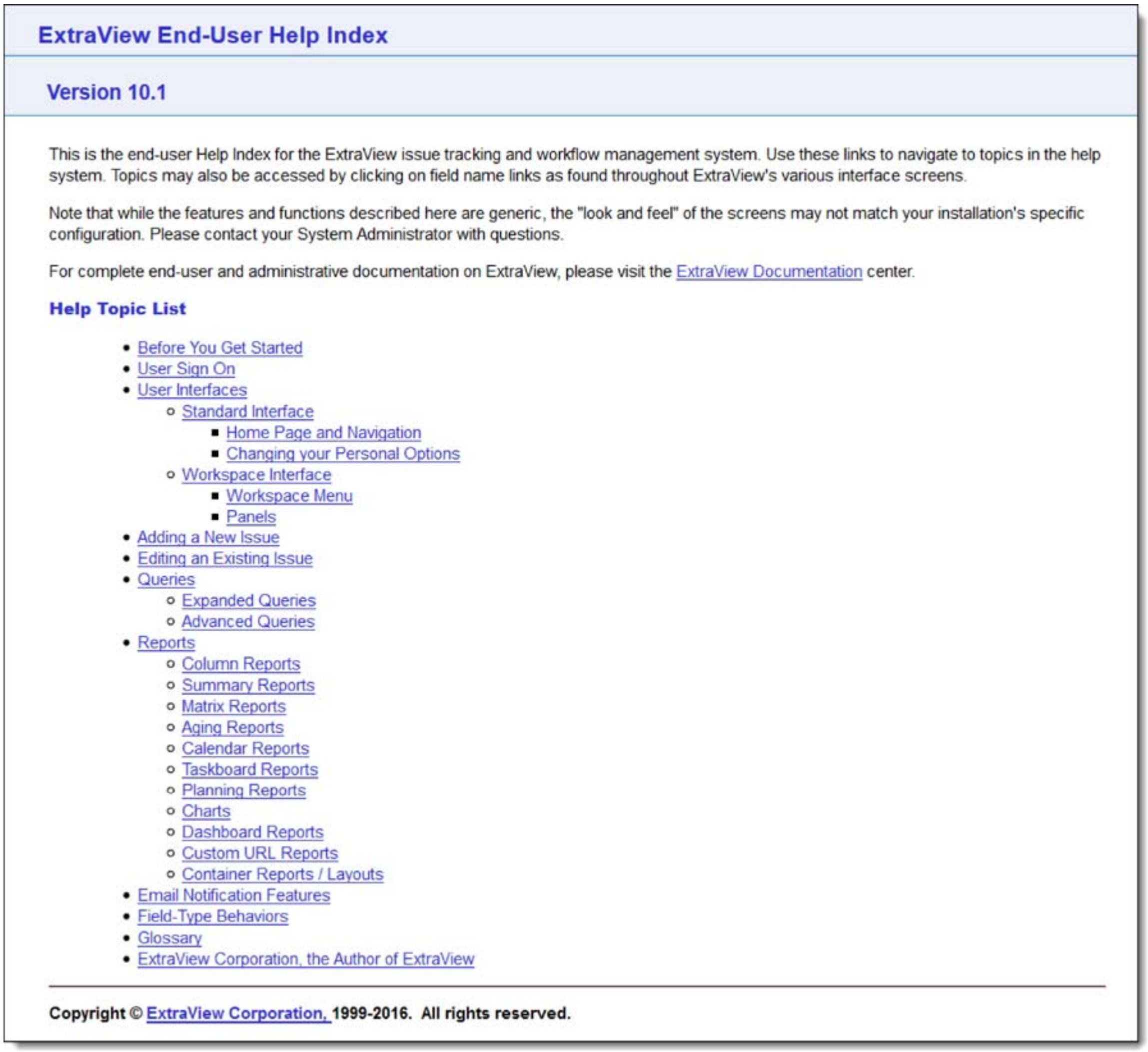
Occasionally, you may need to look up a list for a value, but find that several entries match the search. For example, there may be more than one John Smith in an organization. Ambiguous names may also occur if you only enter a partial name in a field, and then try to insert or update the record. The following screenshot shows how ExtraView presents the information to you, if you entered the letter “G” in a field, then attempted to update the record:



Resolving a user with an ambiguous name

ExtraView Help

The ExtraView application includes a comprehensive HTML-based help system that you can access at any time by clicking the **Help** button on the navigation menu. In addition, many tool tips and context-sensitive links are defined throughout the application.



Index screen

Appendices

Date Masks

Overview

Each ExtraView user has the capability to set their date and time format. The date and time formats determine how dates and times are displayed in output text or html and how they are parsed when entered by the user. The user can select their date and time format on the Personal Options screen. Either one of the in-built formats can be selected, or the user can set the **Date Format** to the value of **Custom Date Mask** and then provide their own mask in the field labeled **Date Mask**.

Localizable Date and Time Formats

Dates and times are represented differently around the world. An ExtraView user may choose one of the date/time formats that are sensitive to the specific locale they are using. The following date and time formats will be represented differently dependent on the user's current locale setting. The following table shows the date format names used in ExtraView, with an example of how this appears in English/US locale representation:

Format Name	Description	Example
SHORT	Short without time	12/30/02
MEDIUMDATE	Medium without time	Dec 30, 2002
LONGDATE	Long without time	December 30, 2002
FULLDATE	Full without time	Monday December 30, 2002
SHORTDATETIME	Short with time	12/30/02 1:15 PM
MEDIUMDATETIME	Medium with time	Dec 30, 2002 1:15 PM
LONGDATETIME	Long with time	December 30, 2002 1:15 PM
FULLDATETIME	Full with time	Monday December 30, 2002 1:15 PM

Standard Date/Time Parsing Formats

Certain date and time formats are built in to ExtraView as patterns to be used for parsing dates. If a date is entered in one of the standard formats, it will be parsed without any errors. Use of a custom date mask extends the possible date/time entry formats to include the custom mask pattern.

The following are the standardized date/time parsing formats:

Format	Example
MM/dd/yy	04/21/03
dd/MM/yy	21/04/03
MM/dd/yyyy	04/21/2003
dd/MM/yyyy	21/04/2003
dd-MMM-yy	21-April-03
dd-MMM-yyyy	21-April-2003
yyyy/MM/dd HH:mm:ss z	2003/04/21 10:23:34 PST
yyyy/MM/dd HH:mm:ss	2003/04/21 10:23:34
yyyy/MM/dd	2003/04/21

yyyy-MM-dd HH:mm:ss	2003-04-21 10:23:34
yyyy MM dd HH:mm:ss	2003 04 21 10:23:34
MM-dd-yyyy HH:mm	04-21-2003 10:23
yyyy-MM-dd	2003-04-21
MM/dd/yy HH:mm	04/21/03 10:23
MM/dd/yy HH	04/21/03 10
yy-MM-dd	03-04-21
MMM dd yyyy	April 21 2003
MMM dd, yyyy	April 21, 2003
MMM. dd yyyy	Apr. 21 2003
MMM. dd, yyyy	Apr. 21, 2003

Custom Date Masks

A custom date mask provides the ExtraView user with the maximum of flexibility, but the representation of dates and times using a custom date mask are formatted similarly regardless of the user's current locale setting. Text strings such as month names or days of week within the representation are locale-sensitive.

Entry of date values into forms can use one of the ExtraView standard date formats or whatever format the user has defined using a custom date mask.

Custom date masks consist of a sequence of characters consisting of punctuation or pattern letters that are chosen from the following:

Letter	Date or Time Component	Usage	Examples
`G`	Era designator	`G`	`AD`
`y`	Year	`yyyy, yy`	`1996; 96`
`Y`	Week Year (context sensitive)	`YYYY, YY`	`2015; 15`
`M`	Month in year (standalone	`MMMM, MMM, MM`	`July; Jul; 07`
`L`	Month in year	`LLLL, LLL, LL`	`July; Jul; 07`
`w`	Week in year	`ww`	`29`
`W`	Week in month	`W`	`3`
`D`	Day in year	`DDD`	`219`

d	Day in month	dd	10
F	Day of week in month	F	3
E	Day in week	EEEE, EE	Tuesday; Tue
a	Am/pm marker	a	PM
H	Hour in day (0 - 23)	HH	24
k	Hour in day (1-24)	kk	24
K	Hour in am/pm (0 - 11)	KK	10
h	Hour in am/pm (1-12)	hh	12
m	Minute in hour	mm	30
s	Second in minute	ss	55
S	Millisecond	SSS	834
z	Time zone (general)	Z	Pacific Standard Time; PST; GMT-08:00
Z	Time zone (RFC 822)	Z	-0800
X	Time zone (ISO 8601)	X	-08:00

Pattern letters are usually repeated, as their number determines the exact presentation:

- **Text**: For formatting, if the number of pattern letters is 4 or more, the full form is used; otherwise a short or abbreviated form is used if available. For parsing, both forms are accepted, independent of the number of pattern letters.
- **Number**: For formatting, the number of pattern letters is the minimum number of digits, and shorter numbers are zero-padded to this amount. For parsing, the number of pattern letters is ignored unless it's needed to separate two adjacent fields.
- **Year**: For formatting, if the number of pattern letters is 2, the year is truncated to 2 digits; otherwise it is interpreted as a number. For parsing, if the number of pattern letters is more than 2, the year is interpreted literally, regardless of the number of digits. So using the pattern "MM/dd/yyyy", "01/11/12" parses to “Jan 11, 12 A.D”. For parsing with the abbreviated year pattern ("y" or "yy"), ExtraView must interpret the abbreviated year relative to some century. In ExtraView, the year on a date parsed from user input is always checked to see if it is greater than 1000. If not, the year is adjusted to a more “rational” value by adding either 1900 or 2000 to the specified year. 2000 is added if the result would be less than or equal to the current year, otherwise, 1900 is added. For example, using a pattern of "MM/dd/yy" and a date presented on Jan 1, 1997, the string "01/11/03" would be interpreted as Jan 11, 2003 while the string "05/04/64" would be interpreted as May 4, 1964.
- **Month**: If the number of pattern letters is 3 or more, the month is interpreted as text; otherwise, it is interpreted as a number.
- **General time zone**: Time zones are interpreted as text if they have names. For time zones representing a GMT offset value, the following syntax is used: GMTOffsetTimeZone: GMT Sign Hours : Minutes Sign: one of - Hours: Digit Digit Digit Minutes: Digit Digit Digit: one of 0 1 2 3 4 5 6 7 8 9 Hours must be between 0 and 23, and Minutes must be between 0 and

59. The format is locale independent and digits must be taken from the Basic Latin block of the Unicode standard. For parsing, RFC 822 time zones are also accepted.
- **RFC 822 time zone**: For formatting, the RFC 822 4-digit time zone format is used: RFC822TimeZone: Sign TwoDigitHours Minutes TwoDigitHours: Digit Digit TwoDigitHours must be between 00 and 23. Other definitions are as for general time zones. For parsing, general time zones are also accepted.

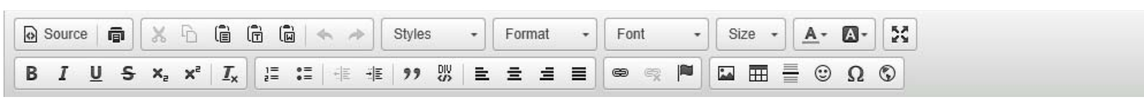
The HTML Area Utility

The HTML Area is available to as an editor for HTML, allowing you to enter rich text or HTML without knowing the HTML code set. It offers many features similar to a word processor, and allows you to switch to directly edit HTML.

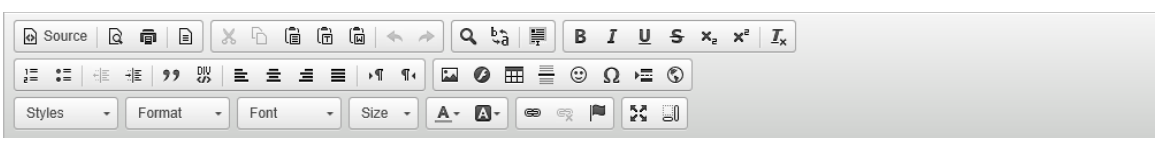
Your administrator will have selected one of three available toolbars or might have customized a toolbar solely for your company's use. These are shown in the following screenshots. The HTML Area utility makes use of scripts that run within the browser, and according to the security settings of the browser, you may need to acknowledge that it is OK to run these scripts.

Basic Toolbar

Standard Toolbar



Full Toolbar

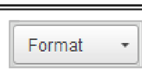


The use of the HTML Area field is intuitive. Just enter text and use the buttons on the toolbar to provide the formatting.

Note that there are some limitations when entering and updating text within the utility. A key limitation is that you cannot click on a link when the field is being updated. This functionality only works when the field is in read-only mode.

The available toolbar buttons are:

Basic	Standard	Full	Button	Function
✓	✓	✓		Toggle bold on and off for the selected text

Basic	Standard	Full	Button	Function
√	√	√		Toggle italic text on and off for the selected text
√	√	√		Toggle underlined text on and off for the selected text
√	√	√		Remove text formatting from the selected text
√	√	√		Toggle a numbered list for the selected text
√	√	√		Togle a bulleted list for the selected text
√	√	√		Add a link to the selected text
√	√	√		Remove the link from the selected text
√	√	√		Print the contents of the HTML Area
	√	√		Toggle the display mode between "what-you-see-is-what-you-get" and HTML source views
	√	√		Cut the selected text to the clipboard
	√	√		Copy the selected text to the clipboard
	√	√		Paste the text from the clipboard to the cursor position
	√	√		Paste the text, as plain unformatted text, from the clipboard to the cursor position
	√	√		Paste text from Microsoft Office documents - this will remove the obscure formatting that Microsoft Office documents often contain
	√	√		Undo the last operation
	√	√		Redo the last operation that was undone
	√	√		Use a style from the list. Note that there are interdependencies with the Style, Format, Font and Size lists. Not all combinations work with all computers, as your browser, or computer operating system may not support the combination you choose
	√	√		Format the text from the selections within the list. Note that there are interdependencies with the Style, Format, Font and Size lists. Not all combinations work with all computers, as your

Basic	Standard	Full	Button	Function
				browser, or computer operating system may not support the combination you choose
	√	√	Font	Select a font from the selections within the list. Note that there are interdependencies with the Style, Format, Font and Size lists. Not all combinations work with all computers, as your browser, or computer operating system may not support the combination you choose
	√	√	5	Set a size for the text from the selections within the list. Note that there are interdependencies with the Style, Format, Font and Size lists. Not all combinations work with all computers, as your browser, or computer operating system may not support the combination you choose
	√	√		Set a color for the selected text
	√	√		Set a background color for the selected text
	√	√		Mximize / Restore the size of the HTML Area within the browser
	√	√		Strikeout the selected text
	√	√		Subscript the selected text
	√	√		Superscript the selected text
	√	√		Outdent the selected text
	√	√		Indent the selected text
	√	√		Place the selected text in blockquotes
	√	√		Place the selected text in an HTML DIV
	√	√		Left-justify the selected text
	√	√		Center-justify the selected text
	√	√		Right-justify the selected text
	√	√		Full-justify the selected text
	√	√		Insert an HTML text anchor tag
	√	√		Insert an image
	√	√		Insert a table

Basic	Standard	Full	Button	Function
	✓	✓		Insert a horizontal rule
	✓	✓		Insert a smiley face
	✓	✓		Insert a character symbol
	✓	✓		Insert an HTML Iframe
		✓		Search for text within the HTML Area field
		✓		Search and replace text within the HTML Area field
		✓		Select all the text within the HTML Area field
		✓		Text direction goes from left-to-right (the default)
		✓		Text direction goes from right-to-left
		✓		Insert a page-break for printing