

# Web Services Interface

This guide describes the Web Services interface within ExtraView. The intended audience is experienced developers who wish to use the Web Services interface to integrate ExtraView to remote external applications that also support a Web Services interface.

ExtraView provides a standardized set of methods to integrate with other applications using a service-orientated architecture (SOA). This complements the web-orientated architecture interface (WOA) that is also implemented within ExtraView and described in the complementary ExtraView Command Line Interface and Application Programming Interface guide. The interface is cross platform and can be accessed from any development platform, including Java and .Net.

A service-oriented architecture is defined as a group of services, which communicate with each other. The process of communication involves either simple data passing or it involves two or more services coordinating some activity. Some means of connecting services to each other is needed.

SOA applications are built out of software services. Services are intrinsically unassociated units of functionality, which have no calls to each other embedded in them. Within ExtraView they map to atomic functions to perform specific actions. Broadly, SOAs implement functionalities most humans would recognize as a service, such as filling out an online application for an account, viewing an online bank statement, inserting an item with a database or running a report. Instead of services embedding calls to each other in their source code, protocols are defined which describe how one or more services can talk to each other. This architecture then relies on your business process expert to link and sequence services to meet your business system requirement.

ExtraView's implementation of web services utilizes a service-orientated architecture to provide a full set of integration points between ExtraView and the consumer of its web services.

## Documentation Examples

The examples in this documentation were prepared using Java as the foundation. There is no certainty that the helper methods used are available in other languages or platforms. It is expected that the experienced developer will recognize this and be able to use the techniques described and adapt them for their own use.

## Downloadable PDF

[The Web Services Interface Guide is downloadable as a single PDF by clicking here.](#) You will need the [Adobe Acrobat Reader](#) to view this.

# Installation & Configuration

The ExtraView Web Service module is packaged as a war file. The configuration file is held inside of this war file, and must be edited for your environment. If you do not have the download, [ExtraView Support](#) will give you the location where the file resides. Download this before starting the installation. The following instructions utilize Apache Tomcat as the application server and Apache as your web server. If you are using different servers, it is assumed you have sufficient knowledge to modify the instructions yourself. To install the Web Service:

- Start by ensuring your application server is running
- The war file you download will have a name similar to evjnnnn-WS.war, where the nnnn is the version and build number of the file. In all the following instructions, replace the nnnn with the actual version and build number of the file
- Rename the evjnnnn-WS.war file to evj-WS.war. You may use a different file name as long as its name does not override an existing file, but once again modify the following instructions to use the name you supply
- Copy the war file to the web application directory of your application server. Normally this is the directory named webapps within your application server
- The application server will expand the Web Service war file, extracting it into a directory named ./evj-WS
- Using the editor of your choice, edit the Web Service configuration file named ./evj-WS/WEB-INF/classes/ev\_ws.properties. The contents of the configuration file will be similar to the following:

```
# (REQUIRED) The URL for the ExtraView API
API_URI=http://yourserver.yourdomain.com/evj/ExtraView/ev_api.action

# (OPTIONAL) The ExtraView user account and password used for PING only
EV_WS_USER=admin
EV_WS_PASSWORD=password

# (OPTIONAL) Used for setting up full RAMPART secure message access to the web service SECURE_ID=service
SECURE_PASSWORD=apache

# (OPTIONAL) The internal expected delimiter (must match the users behavior setting)
DELIMITER=:
```

- If your application server does not expand the war file automatically, you will need to open the war file, edit the configuration file, and re-create the war file before copying it to your application server
- You must change the API\_URI entry to match your ExtraView server location. Replace the http://yourserver.yourdomain.com text with the actual location of your ExtraView server
- Alter the EV\_WS\_USER and the EV\_WS\_PASSWORD entries to match those of a valid ExtraView user
- For the initial installation you may ignore the SECURE\_ID and the SECURE\_PASSWORD entries
- Save the file
- You must update the web server configuration file to include the web services and its associated WSDL file. Edit the httpd.conf file and add the following lines:

```
JkMount /evj-WS/services/* tomcat1
JkMount /evj-WS/wsdl/* tomcat1
```

Alternatively, if you are using an ev.conf or extraview.conf file, you add these mounts into that file. Make sure you save the file after editing

- Restart your application server
- Validate the installation works with the getPing service. The URL to call this will be:

```
http://SERVER_NAME/evj-WS/services/EVSystemService/getPing
```

A successful response will look similar to:

```
<ns:getPingResponse>
  <ns:return>
    Reply: status=SUCCESS: EV-EXTRAVIEW ALIVE, WS-EV-PROPERTIES-OK, EV-REV-UNKNOWN-OK time=94ms  </ns:return>
</ns:getPingResponse>
```

- The WSDL files for your web services are automatically generated as part of the installation. Their URL's are:

```
http://yourserver.yourdomain.com/evj-WS/services/EVSystemService?wsdl http://yourserver.yourdomain.com/evj-WS/services/EVUserService?wsdl
http://yourserver.yourdomain.com/evj-WS/services/EVItemService?wsdl http://yourserver.yourdomain.com/evj-WS/services/EVQueryService?wsdl
```

## Supporting a Large Number of Image Inserts

It is possible to run out of server memory when inserting a large number of images via web services. It is recommended that you provide this setting in the configuration file to increase the WSDL package size:

```
<readerQuotas maxDepth="2147483647" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647"
maxNameTableCharCount="2147483647" />
```

Within your Apache Tomcat configuration, you should set the maximum size in bytes of the POST which will be handled by the container FORM URL parameter parsing. The limit can be altered by setting the following attribute to a value less than or equal to 0. If not specified, the attribute is set to 2097152 (2 megabytes).

```
<Connector port="8082" protocol="HTTP/1.1" URIEncoding="UTF-8"
connectionTimeout="20000" maxPostSize="209715200"
redirectPort="8442" maxParameterCount="1000000" />
```

# Web Services Functions

The functions are broken into four basic groups, each with a list of calls that are appropriate to the group. This guide provides details of each call, along with details of the parameters that they use, and the results returned from the service. An example of each call is provided within the guide.

## User Calls

```
insertUser
updateUser
setCurrentUserRole
getUserByEmail
getUserById
getUserFields
getUserRoles
disableUser
getRolesByUser
insertUserRole
```

## System Calls

```
getPing
getVersion
getFields
getAppDefault
getHeartbeat
getFieldTitle
setWorkingProjectArea
getAllowedFieldValues
executeCustomCode
```

## Report Calls

```
executeReport
executeItemSearch
getFieldList
executeUserSearch
```

## Item Calls

```
getItemFieldList
deleteItem
getChangedItems
getItemAudits
insertItem
updateItem
getItem
itemExists
getItemAttachments
```

# addItemAttachment

The addItemAttachment service attaches a file to an existing item in the ExtraView database.

## Input

| Class                    | Name           | Type   | Required | Details                                                                                                                      |
|--------------------------|----------------|--------|----------|------------------------------------------------------------------------------------------------------------------------------|
| AddItemAttachmentRequest | userId         | String | Yes      | The caller's user ID                                                                                                         |
| AddItemAttachmentRequest | password       | String | Yes      | The caller's password                                                                                                        |
| AddItemAttachmentRequest | attachment     | Object |          | The data handler object as defined by the soap product your using                                                            |
| AddItemAttachmentRequest | itemId         | int    | ?        | The int item id. This field is optional if itemIdStr is given, else it is required. It is recommended that you use itemIdStr |
| AddItemAttachmentRequest | itemIdStr      | String | ?        | The String item Id. This field is optional if itemId is used. It is recommended that you use itemIdStr                       |
| AddItemAttachmentRequest | attachmentName | String | No       |                                                                                                                              |
| AddItemAttachmentRequest | attachmentDesc | String | No       | List of filters for the history                                                                                              |
| AddItemAttachmentRequest | charset        | String | No       |                                                                                                                              |
| AddItemAttachmentRequest | contentType    | String | No       |                                                                                                                              |
| AddItemAttachmentRequest | fieldName      | String | No       |                                                                                                                              |
| AddItemAttachmentRequest | attachmentDesc | String | No       |                                                                                                                              |
| AddItemAttachmentRequest | rowNumber      | String | No       |                                                                                                                              |

## Output

| Class                     | Name          | Type    | Required | Details                           |
|---------------------------|---------------|---------|----------|-----------------------------------|
| AddItemAttachmentResponse | success       | boolean | Yes      | True is succeeded False if failed |
| AddItemAttachmentResponse | returnCode    | String  | No       | See Appendix for details          |
| AddItemAttachmentResponse | returnMessage | String  | No       | Human readable message            |

## Example

```
public static void testAddItemAttachment(EVItemServiceStub stub) {
    try {
        // generate a temp file
        File tempFile = File.createTempFile("ws_test", ".txt");
        FileOutputStream fop = new FileOutputStream(tempFile);
        fop.write("!!TEST FILE!!nWS Java Tester built this file!".getBytes());
        fop.flush();
        fop.close();

        // next setup the data source
        DataInputStream dis = new DataInputStream(new FileInputStream(tempFile));
        BufferedReader br = new BufferedReader(new InputStreamReader(dis));

        List bFileList = new ArrayList();
    }
}
```

```

try {
    byte b;
    while( (b=dis.readByte()) != -1){
        bFileList.add(b);
    }
} catch (Exception e) {}

// and now we can send the file
AddItemAttachmentDocument reqEnvelope =
AddItemAttachmentDocument.Factory.newInstance();
AddItemAttachmentRequest request =
reqEnvelope.addNewAddItemAttachment().addNewRequest();

request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
request.setItemId(CREATED_Item_ID);
byte[] results = new byte[bFileList.size()];
for (int i=0;i
    results[i] = bFileList.get(i);
}
request.setAttachment(results);
request.setAttachmentName(tempFile.getName());
request.setCharset("US-ASCII");
request.setContentType("text/plain");
request.setAttachmentDesc("this is a test file!");

AddItemAttachmentResponseDocument resEnvelope =
stub.addItemAttachment(reqEnvelope);
AddItemAttachmentResponse response =
resEnvelope.getAddItemAttachmentResponse().getReturn();

if (response.getSuccess()) {
    System.out.println("success: [" +
        response.getReturnCode() + "] : " +
        response.getReturnMessage());
    System.out.println("Attachment created for issue " + request.getItemId());
} else {
    System.out.println("failure: [" +
        response.getReturnCode() + "] : " +
        response.getReturnMessage());
}
tempFile.delete();
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
}
}

```

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## deleteItem

This action allows you to delete an existing record within ExtraView's database. Note that you must have permission to delete records before you can execute this action. The security key that controls this is named PR\_RESOLUTION.DELETE\_BUTTON.

### Input

| Class             | Name      | Type   | Required | Details                                                                                                                      |
|-------------------|-----------|--------|----------|------------------------------------------------------------------------------------------------------------------------------|
| DeleteItemRequest | userId    | String | Yes      | The callers user name                                                                                                        |
| DeleteItemRequest | password  | String | Yes      | The callers password                                                                                                         |
| DeleteItemRequest | itemId    | int    | ?        | The int item id. This field is optional if itemIdStr is given, else it is required. It is recommended that you use itemIdStr |
| DeleteItemRequest | itemIdStr | String | ?        | The String item Id. This field is optional if itemId is used. It is recommended that you use itemIdStr                       |

### Output

| Class              | Name    | Type    | Required | Details                           |
|--------------------|---------|---------|----------|-----------------------------------|
| DeleteItemResponse | success | boolean | Yes      | True is succeeded False if failed |

|                    |               |        |    |                          |
|--------------------|---------------|--------|----|--------------------------|
| DeleteItemResponse | returnCode    | String | No | See Appendix for details |
| DeleteItemResponse | returnMessage | String | No | Human readable message   |

### Example

```
public static void testDeleteItem(EVItemServiceStub stub) {
    try {
        DeleteItemDocument reqEnvelope = DeleteItemDocument.Factory.newInstance();
        DeleteItemRequest request = reqEnvelope.addNewDeleteItem().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setItemId(CREATED_Item_ID);
        DeleteItemResponseDocument resEnvelope = stub.deleteItem(reqEnvelope);
        DeleteItemResponse response = resEnvelope.getDeleteItemResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## disableUser

This action disables a user account within ExtraView. Note that there is no facility to delete a user account. This is to keep referential integrity within the database. Users that you want to disable will have created and/or updated issues and their details are required historically in order to be able to display their information.

### Input

| Class             | Name         | Type   | Required | Details                        |
|-------------------|--------------|--------|----------|--------------------------------|
| RemoveUserRequest | userId       | String | Yes      | The callers user name          |
| RemoveUserRequest | password     | String | Yes      | The callers password           |
| RemoveUserRequest | deleteUserId | String | Yes      | The user id you want to delete |

### Output

| Class              | Name          | Type    | Required | Details                           |
|--------------------|---------------|---------|----------|-----------------------------------|
| RemoveUserResponse | success       | boolean | Yes      | True is succeeded False if failed |
| RemoveUserResponse | returnCode    | String  | No       | See Appendix for details          |
| RemoveUserResponse | returnMessage | String  | No       | Human readable message            |

### Example

```
public static void testDisableUser(EVUserServiceStub stub) {
    try {
        DisableUserDocument reqEnvelope = DisableUserDocument.Factory.newInstance();
        DisableUserRequest request = reqEnvelope.addNewDisableUser().addNewRequest();
        request.setRemoveUserId(ServiceClientHelper.generatedUserId);
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        DisableUserResponseDocument resEnvelope = stub.disableUser(reqEnvelope);
        DisableUserResponse response = resEnvelope.getDisableUserResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    }
}
```

```

        response.getReturnMessage());
    } else {
        System.out.println("failure: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    }
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
}
}
}

```

## executeCustomCode

This call invokes the CLI user exit in the UserCustom java class. This implies that there will be additional code written within the UserCustom class to support the call. The power of this is that you can extend the API with your own commands written for your own purposes, to complement the commands and calls documented in this guide.

### Input

| Class                    | Name       | Type    | Required | Details                        |
|--------------------------|------------|---------|----------|--------------------------------|
| ExecuteCustomCodeRequest | userId     | String  | Yes      | The callers user name          |
| ExecuteCustomCodeRequest | password   | String  | Yes      | The callers password           |
| ExecuteCustomCodeRequest | parameters | Array[] | Yes      | An array of name, value pairs. |
| FieldMetaData            | name       | String  | Yes      | The field name                 |
| FieldMetaData            | fixedValue | String  | Yes      | The field value                |
| FieldMetaData            | value      | String  | No       | The field value                |

### Output

| Class                     | Name          | Type    | Required | Details                           |
|---------------------------|---------------|---------|----------|-----------------------------------|
| ExecuteCustomCodeResponse | success       | boolean | Yes      | True is succeeded False if failed |
| ExecuteCustomCodeResponse | returnCode    | String  | No       | See Appendix for details          |
| ExecuteCustomCodeResponse | returnMessage | String  | No       | Human readable message            |

### Example

```

public static void testExecuteCustomCode(EVSystemServiceStub stub) {
    try {
        ExecuteCustomCodeDocument reqEnvelope = ExecuteCustomCodeDocument.Factory.newInstance();
        ExecuteCustomCodeRequest request = reqEnvelope.addNewExecuteCustomCode().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        FieldMetaData[] parameters = new FieldMetaData[1];
        parameters[0] = request.addNewParameters();
        parameters[0].setName("foo");
        parameters[0].setValue("bar");
        request.setParametersArray(parameters);
        ExecuteCustomCodeResponseDocument resEnvelope = stub.executeCustomCode(reqEnvelope);
        ExecuteCustomCodeResponse response =
            resEnvelope.getExecuteCustomCodeResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    }
}

```

```

    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}

```

## executeItemSearch

This API call allows you to search the ExtraView database and to return a set of records that match the search criteria. This function is equivalent to the search capability within the browser version of ExtraView. It is extremely powerful as multiple search filters can be set on different fields. For example, it is straightforward to set up a search that responds to a query such as “tell me all the open items against a specific module within a specific product that contain a specific keyword.

### Input

| Class                    | Name          | Type    | Required | Details                                                                                              |
|--------------------------|---------------|---------|----------|------------------------------------------------------------------------------------------------------|
| ExecuteItemSearchRequest | userId        | String  | Yes      | The callers user name                                                                                |
| ExecuteItemSearchRequest | password      | String  | Yes      | The callers password                                                                                 |
| ExecuteItemSearchRequest | status        | String  | No       | The status of the items being collected                                                              |
| ExecuteItemSearchRequest | pageLength    | Integer | No       | The page length                                                                                      |
| ExecuteItemSearchRequest | persistHandle | String  | No       | A random string to persist the data                                                                  |
| ExecuteItemSearchRequest | recordStart   | Integer | No       | The starting index of records returned                                                               |
| ExecuteItemSearchRequest | recordCount   | Integer | No       | The count of records                                                                                 |
| ExecuteItemSearchRequest | returnRawXML  | boolean | No       | If you want the raw XML returned with the parse fields. This should be set to false for performance. |
| ExecuteItemSearchRequest | fieldMetaData | Array[] | No       | An array of FieldMetaData objects                                                                    |
| FieldMetaData            | id            | String  | Yes      | An array of FieldMetaData objects                                                                    |
| FieldMetaData            | fixedValue    | String  | Yes      | An array of FieldMetaData objects                                                                    |
| FieldMetaData            | value         | String  | No       | An array of FieldMetaData objects                                                                    |

### Output

| Class                     | Name          | Type    | Required | Details                           |
|---------------------------|---------------|---------|----------|-----------------------------------|
| ExecuteItemSearchResponse | success       | boolean | Yes      | True is succeeded False if failed |
| ExecuteItemSearchResponse | returnCode    | String  | No       | See Appendix for details          |
| ExecuteItemSearchResponse | returnMessage | String  | No       | Human readable message            |
| ExecuteItemSearchResponse | xmlResults    | String  | No       | The search results in XML format  |

|                           |                          |         |     |                                                |
|---------------------------|--------------------------|---------|-----|------------------------------------------------|
| ExecuteItemSearchResponse | itemRecords              | Array[] | Yes | An array of ItemRecord objects                 |
| ItemRecord                | numberOfItemRecordFields | int     | Yes | The number of field records in the child array |
| ItemRecord                | itemRecordFields         | Array[] | Yes | An array of ItemRecordField objects            |
| ItemRecordField           | fieldId                  | String  | Yes | The id of the field                            |
| ItemRecordField           | fieldTitle               | String  | Yes | The title of the field                         |
| ItemRecordField           | fieldValue               | String  | Yes | The value of the field                         |
| ItemRecordField           | row                      | int     | Yes | The repeating row value                        |

### Example

```
public static void testExecuteIssueSearch(EVReportServiceStub stub) {
    try {
        ExecuteItemSearchDocument reqEnvelope = ExecuteItemSearchDocument.Factory.newInstance();
        ExecuteItemSearchRequest request =
            reqEnvelope.addNewExecuteItemSearch().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setPageLength(100);
        request.setRecordStart(1);
        request.setRecordCount(120);
        request.setPersistHandle(ServiceClientHelper.randStr);
        request.setReturnRawXML(true);
        request.setStatus("");
        ExecuteItemSearchResponseDocument resEnvelope = stub.executeItemSearch(reqEnvelope);
        ExecuteItemSearchResponse response =
            resEnvelope.getExecuteItemSearchResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## executeReport

This function runs an existing report, using its *report\_id*. This is obtained from the *get\_reports* function.

### Input

| Class                | Name          | Type    | Required | Details                                 |
|----------------------|---------------|---------|----------|-----------------------------------------|
| ExecuteReportRequest | userId        | String  | Yes      | The caller's user name                  |
| ExecuteReportRequest | password      | String  | Yes      | The caller's password                   |
| ExecuteReportRequest | status        | String  | No       | The status of the items being collected |
| ExecuteReportRequest | pageLength    | Integer | Yes      | The page length                         |
| ExecuteReportRequest | persistHandle | String  | No       | A random string to persist the data     |



|                      |              |         |    |                                                                                                                       |
|----------------------|--------------|---------|----|-----------------------------------------------------------------------------------------------------------------------|
| ExecuteReportRequest | recordStart  | Integer | No | The starting index of records returned                                                                                |
| ExecuteReportRequest | recordCount  | Integer | No | The count of records being fetched                                                                                    |
| ExecuteReportRequest | returnRawXML | boolean | No | Determines whether raw XML will be returned with the parse fields. This should be set to false for better performance |

## Output

| Class                 | Name                     | Type    | Required | Details                                        |
|-----------------------|--------------------------|---------|----------|------------------------------------------------|
| ExecuteReportResponse | success                  | boolean | Yes      | True is succeeded False if failed              |
| ExecuteReportResponse | returnCode               | String  | No       | See Appendix for details                       |
| ExecuteReportResponse | returnMessage            | String  | No       | Human readable message                         |
| ExecuteReportResponse | xmlResults               | String  | No       | The search results in XML format               |
| ExecuteReportResponse | itemRecords              | Array[] | Yes      | An array of ItemRecord objects                 |
| ItemRecord            | numberOfItemRecordFields | int     | Yes      | The number of field records in the child array |
| ItemRecord            | itemRecordFields         | Array[] | Yes      | An array of ItemRecordField objects            |
| ItemRecordField       | fieldId                  | String  | Yes      | The id of the field                            |
| ItemRecordField       | fieldTitle               | String  | Yes      | The title of the field                         |
| ItemRecordField       | fieldValue               | String  | Yes      | The value of the field                         |
| ItemRecordField       | row                      | int     | Yes      | The repeating row value                        |

## Example

```
public static void testExecuteReport(EVReportServiceStub stub) {
    try {
        ExecuteReportDocument reqEnvelope = ExecuteReportDocument.Factory.newInstance();
        ExecuteReportRequest request = reqEnvelope.addNewExecuteReport().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setPageLength(100);
        request.setRecordStart(1);
        request.setRecordCount(120);
        request.setPersistHandle(ServiceClientHelper.randStr);
        request.setReportId(ServiceClientHelper.STANDARD_REPORT);
        ExecuteReportResponseDocument resEnvelope = stub.executeReport(reqEnvelope);
        ExecuteReportResponse response = resEnvelope.getExecuteReportResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## executeReportRaw

This function runs an existing report, using its *report\_id*. This is obtained from the *get\_reports* function and returns raw XML results.

### Input

| Class                   | Name          | Type    | Required | Details                                |
|-------------------------|---------------|---------|----------|----------------------------------------|
| ExecuteReportRawRequest | userId        | String  | Yes      | The caller's user name                 |
| ExecuteReportRawRequest | password      | String  | Yes      | The caller's password                  |
| ExecuteReportRawRequest | pageLength    | Integer | Yes      | The page length                        |
| ExecuteReportRawRequest | persistHandle | String  | No       | A random string to persist the data    |
| ExecuteReportRawRequest | recordStart   | Integer | No       | The starting index of records returned |
| ExecuteReportRawRequest | recordCount   | Integer | No       | The count of records being fetched     |

### Output

| Class                    | Name          | Type    | Required | Details                           |
|--------------------------|---------------|---------|----------|-----------------------------------|
| ExecuteReportRawResponse | success       | boolean | Yes      | True is succeeded False if failed |
| ExecuteReportRawResponse | returnCode    | String  | No       | See Appendix for details          |
| ExecuteReportRawResponse | returnMessage | String  | No       | Human readable message            |
| ExecuteReportRawResponse | xmlResults    | String  | No       | The search results in XML format  |

### Example

```
public static void testExecuteReportRaw(EVQueryServiceStub stub) {
    try {
        ExecuteReportRawDocument reqEnvelope =
            ExecuteReportRawDocument.Factory.newInstance();
        ExecuteReportRawRequest request =
            reqEnvelope.addNewExecuteReportRaw().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setPageLength(100);
        request.setRecordStart(1);
        request.setRecordCount(120);
        request.setPersistHandle(ServiceClientHelper.randStr);
        // this query exists on all sites.
        request.setReportId(ServiceClientHelper.STANDARD_REPORT);
        ExecuteReportRawResponseDocument resEnvelope = stub.executeReportRaw(reqEnvelope);
        ExecuteReportRawResponse response =
            resEnvelope.getExecuteReportRawResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            System.out.println("XML Report:\n" + response.getXmlReport());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## executeUserSearch

This action retrieves a list of users stored within ExtraView.

### Input

| Class                    | Name        | Type   | Required | Details                                                                                                                                                                       |
|--------------------------|-------------|--------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ExecuteUserSearchRequest | userId      | String | Yes      | The callers user name                                                                                                                                                         |
| ExecuteUserSearchRequest | password    | String | Yes      | The callers password                                                                                                                                                          |
| ExecuteUserSearchRequest | disabled    | String | No       | Include disabled users in results? { <b>Y</b> (yes), <b>N</b> (no), <b>ONLY</b> (only disabled users)}                                                                        |
| ExecuteUserSearchRequest | filter      | String | No       | This allows your to perform a wildcard pattern search for specific user records. The wildcard is * and you may have more then one of then in the pattern. (eg. *OB* or *OB* ) |
| ExecuteUserSearchRequest | filter_type | String | No       | If a filter is given, a filter_type must be given. Possible values ID, FIRST or LAST. This is the field you want the filter to work on.                                       |

### Output

| Class                     | Name          | Type    | Required | Details                           |
|---------------------------|---------------|---------|----------|-----------------------------------|
| ExecuteUserSearchResponse | success       | boolean | Yes      | True is succeeded False if failed |
| ExecuteUserSearchResponse | returnCode    | String  | No       | See Appendix for details          |
| ExecuteUserSearchResponse | returnMessage | String  | No       | Human readable message            |
| ExecuteUserSearchResponse | users         | Array[] | No       | A list of UserBeans               |
| User                      | userId        | String  | Yes      |                                   |
| User                      | userPassword  | String  | No       |                                   |
| User                      | firstName     | String  | No       |                                   |
| User                      | lastName      | String  | No       |                                   |
| User                      | password      | String  | No       |                                   |
| User                      | email         | String  | No       |                                   |
| User                      | jobTitle      | String  | No       |                                   |
| User                      | companyName   | String  | No       |                                   |

|      |                 |        |    |
|------|-----------------|--------|----|
| User | addressLine1    | String | No |
| User | addressLine2    | String | No |
| User | city            | String | No |
| User | state           | String | No |
| User | postalCode      | String | No |
| User | country         | String | No |
| User | workPhoneNumber | String | No |
| User | homePhoneNumber | String | No |
| User | cellPhoneNumber | String | No |
| User | faxNumber       | String | No |
| User | pageNumber      | String | No |

### Example

```
public static void testExecuteUserSearch(EVReportServiceStub stub) {
    try {
        ExecuteUserSearchDocument reqEnvelope =
            ExecuteUserSearchDocument.Factory.newInstance();
        ExecuteUserSearchRequest request =
            reqEnvelope.addNewExecuteUserSearch().addNewRequest();
        request.setFilter("*" + ServiceClientHelper.ADMIN_USER_ID.toUpperCase() + "*");
        request.setFilterType("ID");
        request.setDisabled("Y");
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        ExecuteUserSearchResponseDocument resEnvelope = stub.executeUserSearch(reqEnvelope);
        ExecuteUserSearchResponse response =
            resEnvelope.getExecuteUserSearchResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getAllUserRoles

This action gets all the possible roles available to all users within the ExtraView database.

### Input

| Class                  | Name   | Type   | Required | Details               |
|------------------------|--------|--------|----------|-----------------------|
| GetAllUserRolesRequest | userId | String | Yes      | The callers user name |

|                        |          |        |     |                      |
|------------------------|----------|--------|-----|----------------------|
| GetAllUserRolesRequest | password | String | Yes | The callers password |
|------------------------|----------|--------|-----|----------------------|

## Output

| Class                   | Name          | Type    | Required | Details                           |
|-------------------------|---------------|---------|----------|-----------------------------------|
| GetAllUserRolesResponse | success       | boolean | Yes      | True is succeeded False if failed |
| GetAllUserRolesResponse | returnCode    | String  | No       | See Appendix for details          |
| GetAllUserRolesResponse | returnMessage | String  | No       | Human readable message            |
| GetAllUserRolesResponse | roles         | Array[] | No       | A list of RoleBeans               |
| Role                    | roleId        | String  | Yes      |                                   |
| Role                    | currentRole   | boolean | Yes      |                                   |
| Role                    | roleName      | String  | Yes      |                                   |

## Example

```
public static void testGetUserRolesByUser(EVUserServiceStub stub) {
    try {
        GetAllUserRolesDocument reqEnvelope = GetAllUserRolesDocument.Factory.newInstance();
        GetAllUserRolesRequest request = reqEnvelope.addNewGetAllUserRoles().addNewRequest();
        request.setUserid(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetAllUserRolesResponseDocument resEnvelope = stub.getAllUserRoles(reqEnvelope);
        GetAllUserRolesResponse response =
            resEnvelope.getGetAllUserRolesResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getAllowedFieldValues

This action retrieves the list of child values for a given parent value when two fields are in an allowed value relationship within the database.

### Input

| Class                   | Name          | Type   | Required | Details               |
|-------------------------|---------------|--------|----------|-----------------------|
| GetAllowedFieldsRequest | userId        | String | Yes      | The callers user name |
| GetAllowedFieldsRequest | password      | String | Yes      | The callers password  |
| GetAllowedFieldsRequest | fieldId       | String | Yes      |                       |
| GetAllowedFieldsRequest | parentFieldId | String | Yes      |                       |

|                         |             |        |     |
|-------------------------|-------------|--------|-----|
| GetAllowedFieldsRequest | parentValue | String | Yes |
|-------------------------|-------------|--------|-----|

## Output

| Class                    | Name              | Type    | Required | Details                           |
|--------------------------|-------------------|---------|----------|-----------------------------------|
| GetAllowedFieldsResponse | success           | boolean | Yes      | True is succeeded False if failed |
| GetAllowedFieldsResponse | returnCode        | String  | No       | See Appendix for details          |
| GetAllowedFieldsResponse | returnMessage     | String  | No       | Human readable message            |
| GetAllowedFieldsResponse | <i>fields</i>     | Array   | No       | The list of Field objects         |
| Field                    | id                | String  | Yes      |                                   |
| Field                    | name              | String  | Yes      |                                   |
| Field                    | value             | String  | No       |                                   |
| Field                    | childOfFieldId    | String  | No       |                                   |
| Field                    | repeatingRowField | boolean | No       |                                   |
| Field                    | textAreaField     | boolean | No       |                                   |
| Field                    | typeOfUserField   | boolean | No       |                                   |

## Example

```
public static void testGetAllowedFieldValues(EVSystemServiceStub stub) {
    try {
        GetAllowedFieldValuesDocument reqEnvelope = GetAllowedFieldValuesDocument.Factory.newInstance();
        GetAllowedFieldsRequest request =
            reqEnvelope.addNewGetAllowedFieldValues().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setFieldId("PROJECT");
        request.setParentFieldId("AREA");
        request.setParentValue("1");
        GetAllowedFieldValuesResponseDocument resEnvelope =
            stub.getAllowedFieldValues(reqEnvelope);
        GetAllowedFieldsResponse response =
            resEnvelope.getGetAllowedFieldValuesResponse().getReturn();
        if (response.isSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getBehaviorSetting

This action retrieves the value of a single behavior setting from within the ExtraView database.

### Input

| Class                | Name                | Type   | Required | Details                                       |
|----------------------|---------------------|--------|----------|-----------------------------------------------|
| GetAppDefaultRequest | userId              | String | Yes      | The callers user name                         |
| GetAppDefaultRequest | password            | String | Yes      | The callers password                          |
| GetAppDefaultRequest | behaviorSettingName | String | Yes      | The field name you want the default values of |

## Output

| Class                 | Name              | Type    | Required | Details                           |
|-----------------------|-------------------|---------|----------|-----------------------------------|
| GetAppDefaultResponse | success           | boolean | Yes      | True is succeeded False if failed |
| GetAppDefaultResponse | returnCode        | String  | No       | See Appendix for details          |
| GetAppDefaultResponse | returnMessage     | String  | No       | Human readable message            |
| GetAppDefaultResponse | <i>field</i>      | Object  | No       | A single Field object             |
| Field                 | id                | String  | Yes      |                                   |
| Field                 | name              | String  | No       |                                   |
| Field                 | value             | String  | No       |                                   |
| Field                 | childOfFieldId    | String  | No       |                                   |
| Field                 | repeatingRowField | boolean | No       |                                   |
| Field                 | textAreaField     | boolean | No       |                                   |
| Field                 | typeOfUserField   | boolean | No       |                                   |

## Example

```
public static void testGetAppDefault(EVSystemServiceStub stub) {
    try {
        GetAppDefaultDocument reqEnvelope = GetAppDefaultDocument.Factory.newInstance();
        GetAppDefaultRequest request = reqEnvelope.addNewGetAppDefault().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setAppDefaultName("DEFAULT_TEXT_REPORT_DELIMITER");
        GetAppDefaultResponseDocument resEnvelope = stub.getAppDefault(reqEnvelope);
        GetAppDefaultResponse response = resEnvelope.getGetAppDefaultResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getChangedItems

The getChangedItems command returns all the changes to item records, from a specified point in time to the current time.

### Input

| Class              | Name              | Type     | Required | Details                                                                                                                                                                                                                                                       |
|--------------------|-------------------|----------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ItemHistoryRequest | userId            | String   | Yes      | The callers user name                                                                                                                                                                                                                                         |
| ItemHistoryRequest | password          | String   | Yes      | The callers password                                                                                                                                                                                                                                          |
| ItemHistoryRequest | returnRawXML      |          |          |                                                                                                                                                                                                                                                               |
| ItemHistoryRequest | startTimeSlice    | Date     | Yes      | The cutoff timestamp value is not included in the issues generated by this command; that is, the comparison is "item timestamp is greater than the cutoff timestamp."                                                                                         |
| ItemHistoryRequest | endTimeSlice      | Date     | No       | The endTimeSlice is optional. If it omitted, there is no constraint on the end of the cutoff period. If it provided, the value must be greater than the value of cutoff. This is used to limit the items for which history is generated.                      |
| ItemHistoryRequest | userNameMask      | String   | No       | The optional userNameMask may be used to override the behavior setting named USERNAME_DISPLAY, for the duration of the execution of a single API call. This allows the developer to return the user names in a different format than the system-wide default. |
| ItemHistoryRequest | filters           | Array [] | No       | List of filters for the history.                                                                                                                                                                                                                              |
| ItemHistoryRequest | startTimeSlice    | Date     | Yes      | The cutoff timestamp value is not included in the issues generated by this command; that is, the comparison is "item timestamp is greater than the cutoff timestamp."                                                                                         |
| Field              | id                | String   | Yes      |                                                                                                                                                                                                                                                               |
| Field              | name              | String   | No       |                                                                                                                                                                                                                                                               |
| Field              | value             | String   | No       |                                                                                                                                                                                                                                                               |
| Field              | childOffFieldId   | String   | No       |                                                                                                                                                                                                                                                               |
| Field              | repeatingRowField | boolean  | No       |                                                                                                                                                                                                                                                               |
| Field              | textAreaField     | boolean  | No       |                                                                                                                                                                                                                                                               |
| Field              | typeOfUserField   | boolean  | No       |                                                                                                                                                                                                                                                               |

### Output

| Class               | Name    | Type    | Required | Details                           |
|---------------------|---------|---------|----------|-----------------------------------|
| ItemHistoryResponse | success | boolean | Yes      | True is succeeded False if failed |



|                     |                          |          |     |                                                |
|---------------------|--------------------------|----------|-----|------------------------------------------------|
| ItemHistoryResponse | returnCode               | String   | No  | See Appendix for details                       |
| ItemHistoryResponse | returnMessage            | String   | No  | Human readable message                         |
| ItemHistoryResponse | xml                      | String   | No  | A list of AttachmentBeans                      |
| ItemHistoryResponse | itemRecords              | Array [] | No  | The date the attachment was added to the item  |
| ItemRecord          | numberOfItemRecordFields | int      | Yes | The number of field records in the child array |
| ItemRecord          | numberOfItemRecordFields | int      | Yes | An array of ItemRecordField objects            |
| ItemRecordField     | fieldId                  | String   | Yes | The id of the field                            |
| ItemRecordField     | fieldTitle               | String   | Yes | The title of the field                         |
| ItemRecordField     | fieldValue               | String   | Yes | The value of the field                         |
| ItemRecordField     | row                      | int      | Yes | The repeating row value                        |

## Example

```
public static void testGetChangedItems(EVItemServiceStub stub) {
    try {
        GetChangedItemsDocument reqEnvelope = GetChangedItemsDocument.Factory.newInstance();
        ItemHistoryRequest request = reqEnvelope.addNewGetChangedItems().addNewRequest();
        Calendar startCal = new GregorianCalendar();
        startCal.add(Calendar.DATE, -30);
        // look back 30 days ago
        Calendar endCal = new GregorianCalendar();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setStartTimeSlice(startCal);
        request.setEndTimeSlice(endCal);
        request.setReturnRawXML(true);
        GetChangedItemsResponseDocument resEnvelope = stub.getChangedItems(reqEnvelope);
        ItemHistoryResponse response = resEnvelope.getGetChangedItemsResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            System.out.println("XML Report:n" + response.getXml());
            for (ItemRecord record: response.getItemRecordsArray()) {
                System.out.println(" ++++++ ");
                System.out.println(" + New Record + ");
                for (ItemRecordField field: record.getItemRecordFieldsArray()) {
                    System.out.println(" + New Field + ");
                    System.out.println(" - Field Id: " + field.getFieldId());
                    System.out.println(" - Value: " + field.getFieldValue());
                    System.out.println(" - Title: " + field.getFieldTitle());
                    System.out.println(" - Row: " + field.getRow());
                }
            }
        }
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getFieldList

This action provides a list of all the available fields to the user who calls the function.

### Input

| Class               | Name     | Type   | Required | Details               |
|---------------------|----------|--------|----------|-----------------------|
| GetFieldListRequest | userId   | String | Yes      | The callers user name |
| GetFieldListRequest | password | String | Yes      | The callers password  |

## Output

| Class                | Name              | Type    | Required | Details                           |
|----------------------|-------------------|---------|----------|-----------------------------------|
| GetFieldListResponse | success           | boolean | Yes      | True is succeeded False if failed |
| GetFieldListResponse | returnCode        | String  | No       | See Appendix for details          |
| GetFieldListResponse | returnMessage     | String  | No       | Human readable message            |
| GetFieldListResponse | <i>fields</i>     | Array   | No       | A list of Field objects           |
| Field                | id                | String  | Yes      |                                   |
| Field                | name              | String  | Yes      |                                   |
| Field                | value             | String  | No       |                                   |
| Field                | childOfFieldId    | String  | No       |                                   |
| Field                | repeatingRowField | boolean | No       |                                   |
| Field                | textAreaField     | boolean | No       |                                   |
| Field                | typeOfUserField   | boolean | No       |                                   |

## Example

```
public static void testGetFieldList(EVReportServiceStub stub) {
    try {
        GetFieldListDocument reqEnvelope = GetFieldListDocument.Factory.newInstance();
        GetFieldListRequest request = reqEnvelope.addNewGetFieldList().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetFieldListResponseDocument resEnvelope = stub.getFieldList(reqEnvelope);
        GetFieldListResponse response = resEnvelope.getGetFieldListResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getChangedItems

The getChangedItems command returns all the changes to item records, from a specified point in time to the current time.

**Input**

| Class              | Name              | Type    | Required | Details                                                                                                                                                                                                                                                       |
|--------------------|-------------------|---------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ItemHistoryRequest | userId            | String  | Yes      | The caller's user name                                                                                                                                                                                                                                        |
| ItemHistoryRequest | password          | String  | Yes      | The caller's password                                                                                                                                                                                                                                         |
| ItemHistoryRequest | returnRawXML      | Boolean | No       | If you want the raw XML returned with the parse fields. This should be set to false for performance.                                                                                                                                                          |
| ItemHistoryRequest | startTimeSlice    | Date    | Yes      | The cutoff timestamp value is not included in the issues generated by this command. The comparison is "item timestamp is greater than cutoff timestamp".                                                                                                      |
| ItemHistoryRequest | endTimeSlice      | Date    | Yes      | The optional userNameMask may be used to override the behavior setting named USERNAME_DISPLAY, for the duration of the execution of a single API call. This allows the developer to return the user names in a different format than the system-wide default. |
| ItemHistoryRequest | userNameMask      | String  | No       | The optional userNameMask may be used to override the behavior setting named USERNAME_DISPLAY, for the duration of the execution of a single API call. This allows the developer to return the user names in a different format than the system-wide default. |
| ItemHistoryRequest | filters           | Array[] | No       | List of filters for the history.                                                                                                                                                                                                                              |
| Field              | id                | String  | Yes      |                                                                                                                                                                                                                                                               |
| Field              | name              | String  | No       |                                                                                                                                                                                                                                                               |
| Field              | value             | String  | No       |                                                                                                                                                                                                                                                               |
| Field              | childOfFieldId    | String  | No       |                                                                                                                                                                                                                                                               |
| Field              | repeatingRowField | boolean | No       |                                                                                                                                                                                                                                                               |
| Field              | textAreaField     | boolean | No       |                                                                                                                                                                                                                                                               |
| Field              | typeOfUserField   | boolean | No       |                                                                                                                                                                                                                                                               |

**Output**

| Class               | Name          | Type    | Required | Details                           |
|---------------------|---------------|---------|----------|-----------------------------------|
| ItemHistoryResponse | success       | boolean | Yes      | True is succeeded False if failed |
| ItemHistoryResponse | returnCode    | String  | No       | See Appendix for details          |
| ItemHistoryResponse | returnMessage | String  | No       | Human readable message            |
| ItemHistoryResponse | xml           | String  | No       | A list of AttachmentBeans         |

|                     |                          |         |     |                                                |
|---------------------|--------------------------|---------|-----|------------------------------------------------|
| ItemHistoryResponse | itemRecords              | Array[] | No  | The date the attachment was added to the item  |
| ItemRecord          | numberOfItemRecordFields | int     | Yes | The number of field records in the child array |
| ItemRecord          | itemRecordFields         | Array[] | Yes | An array of ItemRecordField objects            |
| ItemRecordField     | fieldId                  | String  | Yes | The id of the field                            |
| ItemRecordField     | fieldTitle               | String  | Yes | The title of the field                         |
| ItemRecordField     | fieldValue               | String  | Yes | The value of the field                         |
| ItemRecordField     | row                      | int     | Yes | The repeating row value                        |

## Example

```
public static void testGetChangedItems(EVItemServiceStub stub) {
    try {
        GetChangedItemsDocument reqEnvelope = GetChangedItemsDocument.Factory.newInstance();
        ItemHistoryRequest request = reqEnvelope.addNewGetChangedItems().addNewRequest();
        Calendar startCal = new GregorianCalendar();
        startCal.add(Calendar.DATE, -30);
        // look back 30 days ago
        Calendar endCal = new GregorianCalendar();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setStartTimeSlice(startCal);
        request.setEndTimeSlice(endCal);
        request.setReturnRawXML(true);
        GetChangedItemsResponseDocument resEnvelope = stub.getChangedItems(reqEnvelope);
        ItemHistoryResponse response = resEnvelope.getGetChangedItemsResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            System.out.println("XML Report:n" + response.getXml());
            for (ItemRecord record: response.getItemRecordsArray()) {
                System.out.println(" ++++++ ");
                System.out.println(" + New Record + ");
                for (ItemRecordField field: record.getItemRecordFieldsArray()) {
                    System.out.println(" + New Field + ");
                    System.out.println(" - Field Id: " + field.getFieldId());
                    System.out.println(" - Value: " + field.getFieldValue());
                    System.out.println(" - Title: " + field.getFieldTitle());
                    System.out.println(" - Row: " + field.getRow());
                }
            }
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getFieldMetadata

This function retrieved the metadata related to the fields and their fixed values.

### Input

| Class                   | Name     | Type   | Required | Details               |
|-------------------------|----------|--------|----------|-----------------------|
| GetFieldMetadataRequest | userId   | String | Yes      | The callers user name |
| GetFieldMetadataRequest | Password | String | Yes      | The callers password  |

|                         |              |          |    |                                                         |
|-------------------------|--------------|----------|----|---------------------------------------------------------|
| GetFieldMetaDataRequest | fieldIds     | String[] | No | The array of field id's the meta data is requested for. |
| GetFieldMetaDataRequest | getAllFields | boolean  | No | An overriding flag to return all the possible fields.   |

## Output

| Class                    | Name          | Type    | Required | Details                           |
|--------------------------|---------------|---------|----------|-----------------------------------|
| GetFieldMetaDataResponse | Success       | boolean | Yes      | True is succeeded False if failed |
| GetFieldMetaDataResponse | returnCode    | String  | No       | See Appendix for details          |
| GetFieldMetaDataResponse | returnMessage | String  | No       | Human readable message            |
| GetFieldMetaDataResponse | FieldMetaData | String  | Yes      | The report in XML format          |

## Example

```
public static void getFieldMetaData(EVSystemServiceStub stub) {
    try {
        GetFieldMetaDataDocument reqEnvelope =
            GetFieldMetaDataDocument.Factory.newInstance();
        GetFieldMetaDataRequest request =
            reqEnvelope.addNewGetFieldMetaData().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setGetAllFields(true);
        GetFieldMetaDataResponseDocument resEnvelope = stub.getFieldMetaData(reqEnvelope);
        GetFieldMetaDataResponse response =
            resEnvelope.getGetFieldMetaDataResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
}
```

## getFieldTitle

This action retrieves the title of a field in the ExtraView data dictionary, by providing its fixed name. Other details about the field are also returned, as shown below in the output of the call.

### Input

| Class                | Name     | Type   | Required | Details                                   |
|----------------------|----------|--------|----------|-------------------------------------------|
| GetFieldTitleRequest | userId   | String | Yes      | The callers user name                     |
| GetFieldTitleRequest | password | String | Yes      | The callers password                      |
| GetFieldTitleRequest | fieldId  | String | Yes      | The field id you want to get the title of |

### Output

| Class | Name | Type | Required | Details |
|-------|------|------|----------|---------|
|-------|------|------|----------|---------|

|                       |                   |         |     |                                   |
|-----------------------|-------------------|---------|-----|-----------------------------------|
| GetFieldTitleResponse | success           | boolean | Yes | True is succeeded False if failed |
| GetFieldTitleResponse | returnCode        | String  | No  | See Appendix for details          |
| GetFieldTitleResponse | returnMessage     | String  | No  | Human readable message            |
| GetFieldTitleResponse | <i>field</i>      | Object  | No  | A single Field object             |
| Field                 | id                | String  | Yes |                                   |
| Field                 | name              | String  | Yes |                                   |
| Field                 | value             | String  | No  |                                   |
| Field                 | childOfFieldId    | String  | No  |                                   |
| Field                 | repeatingRowField | boolean | No  |                                   |
| Field                 | textAreaField     | boolean | No  |                                   |
| Field                 | typeOfUserField   | boolean | No  |                                   |

## Example

```
public static void testGeFieldTitle(EVSystemServiceStub stub) {
    try {
        GetFieldTitleDocument reqEnvelope = GetFieldTitleDocument.Factory.newInstance();
        GetFieldTitleRequest request = reqEnvelope.addNewGetFieldTitle().addNewParam0();
        request.setUserid(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setFieldId("STATUS");
        GetFieldTitleResponseDocument resEnvelope = stub.getGeFieldTitle(reqEnvelope);
        GetFieldTitleResponse response = resEnvelope.getGetFieldTitleResponse().getReturn();
        if (response.isSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getFields

This action provides a list of all the fields available to the user. Note that all of ExtraView's security is in force and the calling user will only see the fields to which he has access. Also note that there is no difference in the way that User Defined Fields (UDF's) are shown compared to ExtraView's built-in fields. These UDF's are handled in a seamless way within the API.

### Input

| Class            | Name     | Type   | Required | Details               |
|------------------|----------|--------|----------|-----------------------|
| GetFieldsRequest | userid   | String | Yes      | The callers user name |
| GetFieldsRequest | password | String | Yes      | The callers password  |

**Output**

| Class             | Name              | Type    | Required | Details                           |
|-------------------|-------------------|---------|----------|-----------------------------------|
| GetFieldsResponse | success           | boolean | Yes      | True is succeeded False if failed |
| GetFieldsResponse | returnCode        | String  | No       | See Appendix for details          |
| GetFieldsResponse | returnMessage     | String  | No       | Human readable message            |
| GetFieldsResponse | fields            | Array[] | No       | A list of Field objects           |
| Field             | id                | String  | Yes      |                                   |
| Field             | name              | String  | No       |                                   |
| Field             | value             | String  | No       |                                   |
| Field             | childOffieldId    | String  | No       |                                   |
| Field             | repeatingRowField | boolean | No       |                                   |
| Field             | textAreaField     | boolean | No       |                                   |
| Field             | typeOfUserField   | boolean | No       |                                   |

**Example**

```

public static void testGetFields(EVSystemServiceStub stub) {
    try {
        GetFieldsDocument reqEnvelope = GetFieldsDocument.Factory.newInstance();
        GetFieldsRequest request = reqEnvelope.addNewGetFields().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetFieldsResponseDocument resEnvelope = stub.getFields(reqEnvelope);
        GetFieldsResponse response = resEnvelope.getGetFieldsResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}

```

**getHeartbeat**

This API call provides an indication of the status of ExtraView. It is often used on a server remote to the ExtraView installation and called every few minutes to check that the ExtraView server is functioning correctly. If the call does not get a valid return, an alarm or notification may then be sent to an administrator.

**Input**

| Class               | Name   | Type   | Required | Details               |
|---------------------|--------|--------|----------|-----------------------|
| GetHeartbeatRequest | userId | String | Yes      | The callers user name |

|                     |          |        |     |                      |
|---------------------|----------|--------|-----|----------------------|
| GetHeartbeatRequest | password | String | Yes | The callers password |
|---------------------|----------|--------|-----|----------------------|

## Output

| Class                | Name               | Type                | Required | Details                                                                                           |
|----------------------|--------------------|---------------------|----------|---------------------------------------------------------------------------------------------------|
| GetHeartbeatResponse | success            | boolean             | Yes      | True is succeeded False if failed                                                                 |
| GetHeartbeatResponse | returnCode         | String              | No       | See Appendix for details                                                                          |
| GetHeartbeatResponse | returnMessage      | String              | No       | Human readable message                                                                            |
| GetHeartbeatResponse | evStatus           | String              | Yes      | ExtraView System Status                                                                           |
| GetHeartbeatResponse | dbStatus           | String              | Yes      | ExtraView Database Status                                                                         |
| GetHeartbeatResponse | dbDate             | Date                | Yes      | The current date in the Database                                                                  |
| GetHeartbeatResponse | freeMemory         | String              | Yes      | Free memory on application server                                                                 |
| GetHeartbeatResponse | totalMemory        | Integer             | Yes      | Total memory on application server                                                                |
| GetHeartbeatResponse | serviceCount       | Integer             | Yes      | The current number of Extraview sessions                                                          |
| GetHeartbeatResponse | executeTime        | Long                | Yes      | The time it took to execute this call                                                             |
| GetHeartbeatResponse | tasks              | Array of TaskInfo   | No       | The information on tasks configured on the node of the server where the service is executed       |
| TaskInfo             | nodeId             | String              | No       | The name of the node hosting the service                                                          |
| TaskInfo             | startOption        | String              | No       |                                                                                                   |
| TaskInfo             | taskState          | String              | No       | START_NOW, STOP_NOW, START_ON_BOOT, or none                                                       |
| TaskInfo             | pollInterval       | String              | No       | The minimum number of seconds between polled executions                                           |
| TaskInfo             | threads            | Array of ThreadInfo | No       |                                                                                                   |
| ThreadInfo           | threadState        | String              | No       | Running or stopped                                                                                |
| ThreadInfo           | secsSinceExecution | Long                | No       | The number of seconds since the task was most recently scheduled to run                           |
| ThreadInfo           | priority           | Long                | No       | The priority of the thread (using Java thread priority values). This may not appear in the output |

## Example



```

public static void testGetHeartbeat(EVSystemServiceStub stub) {
    try {
        GetHeartbeatDocument reqEnvelope = GetHeartbeatDocument.Factory.newInstance();
        GetHeartbeatRequest request = reqEnvelope.addNewGetHeartbeat().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetHeartbeatResponseDocument resEnvelope = stub.getHeartbeat(reqEnvelope);
        GetHeartbeatResponse response = resEnvelope.getGetHeartbeatResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}

```

## getItem

Retrieves an item from the ExtraView database based upon the itemId you provide in the function call.

### Input

| Class          | Name         | Type    | Required | Details                                                                                              |
|----------------|--------------|---------|----------|------------------------------------------------------------------------------------------------------|
| GetItemRequest | userId       | String  | Yes      | The callers user name                                                                                |
| GetItemRequest | password     | String  | Yes      | The callers password                                                                                 |
| GetItemRequest | itemId       | Integer | No       | The Id of the item being fetched                                                                     |
| GetItemRequest | itemId       | int     | ?        | The int item id (this is optional if itemIdStr is given, else it is required)                        |
| GetItemRequest | returnRawXML | Boolean | No       | If you want the raw XML returned with the parse fields. This should be set to false for performance. |

### Output

| Class                     | Name                     | Type    | Required | Details                                        |
|---------------------------|--------------------------|---------|----------|------------------------------------------------|
| GetItemResponse           | success                  | boolean | Yes      | True is succeeded False if failed              |
| GetItemResponse           | returnCode               | String  | No       | See Appendix for details                       |
| GetItemResponse           | returnMessage            | String  | No       | Human readable message                         |
| GetItemResponse           | xml                      | String  | No       | The item in XML format                         |
| ExecuteItemSearchResponse | itemRecords              | Array[] | Yes      | An array of ItemRecord objects                 |
| ItemRecord                | numberOfItemRecordFields | int     | Yes      | The number of field records in the child array |
| ItemRecord                | itemRecordFields         | Array[] | Yes      | An array of ItemRecordField objects            |
| ItemRecordField           | fieldId                  | String  | Yes      | The id of the field                            |

|                 |            |        |     |                         |
|-----------------|------------|--------|-----|-------------------------|
| ItemRecordField | fieldTitle | String | Yes | The title of the field  |
| ItemRecordField | fieldValue | String | Yes | The value of the field  |
| ItemRecordField | row        | int    | Yes | The repeating row value |

## Example

```
public static void testGetItem(EVItemServiceStub stub) {
    try {
        GetItemDocument reqEnvelope = GetItemDocument.Factory.newInstance();
        GetItemRequest request = reqEnvelope.addNewGetItem().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setItemId(CREATED_ISSUE_ID);
        request.setReturnRawXML(true);
        GetItemResponseDocument resEnvelope = stub.getItem(reqEnvelope);
        GetItemResponse response = resEnvelope.getGetItemResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getItemAttachments

This function returns the metadata about the file attachments for an item that exists in ExtraView. This method will only return data about the attachments. To get the attachments use the http call to the API.

### Input

| Class                     | Name      | Type   | Required | Details                                                                                                                      |
|---------------------------|-----------|--------|----------|------------------------------------------------------------------------------------------------------------------------------|
| GetItemAttachmentsRequest | userId    | String | Yes      | The callers user name                                                                                                        |
| GetItemAttachmentsRequest | password  | String | Yes      | The callers password                                                                                                         |
| GetItemAttachmentRequest  | itemId    | int    | ?        | The int item id. This field is optional if itemIdStr is given, else it is required. It is recommended that you use itemIdStr |
| GetItemAttachmentRequest  | itemIdStr | String | ?        | The String item Id. This field is optional if itemId is used. It is recommended that you use itemIdStr                       |

### Output

| Class                      | Name               | Type    | Required | Details                           |
|----------------------------|--------------------|---------|----------|-----------------------------------|
| GetItemAttachmentsResponse | success            | boolean | Yes      | True is succeeded False if failed |
| GetItemAttachmentsResponse | returnCode         | String  | No       | See Appendix for details          |
| GetItemAttachmentsResponse | returnMessage      | String  | No       | Human readable message            |
| GetItemAttachmentsResponse | <i>attachments</i> | Array   | No       | A list of AttachmentBeans         |

|            |                   |         |     |                                               |
|------------|-------------------|---------|-----|-----------------------------------------------|
| Attachment | attachmentDate    | Date    | Yes | The date the attachment was added to the item |
| Attachment | fileName          | String  | Yes | The file name of the attachment               |
| Attachment | fileSize          | Integer | Yes | The file size of the attachment               |
| Attachment | attachmentCreator | String  | Yes | The userId who inserted the attachment        |
| Attachment | attachmentId      | Integer | Yes | The id of the attachment                      |
| Attachment | description       | String  | Yes | The description of the attachment             |
| Attachment | fileType          | String  | No  | The optional mime type                        |

### Example

```
public static void testGetItemAttachments(EVItemServiceStub stub) {
    try {
        GetItemAttachmentsDocument reqEnvelope = GetItemAttachmentsDocument.Factory.newInstance();
        GetItemAttachmentsRequest request =
            reqEnvelope.addNewGetItemAttachments().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setItemId(CREATED_ISSUE_ID);
        GetItemAttachmentsResponseDocument resEnvelope =
            stub.getItemAttachments(reqEnvelope);
        GetItemAttachmentsResponse response =
            resEnvelope.getGetItemAttachmentsResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getItemAudits

The `getItemAudits` action returns all the changes to a filtered list of item records, from a specified point in time to the current time.

### Input

| Class              | Name           | Type   | Required | Details                                                                                                                                                                                                                                                    |
|--------------------|----------------|--------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ItemHistoryRequest | userId         | String | Yes      | The caller's user ID                                                                                                                                                                                                                                       |
| ItemHistoryRequest | password       | String | Yes      | The caller's password                                                                                                                                                                                                                                      |
| ItemHistoryRequest | returnRawXML   |        |          |                                                                                                                                                                                                                                                            |
| ItemHistoryRequest | startTimeSlice | Date   | Yes      | The cutoff timestamp value is not included in the issues generated by this command; that is, the comparison is <i>item timestamp is greater than cutoff timestamp</i>                                                                                      |
| ItemHistoryRequest | endTimeSlice   | Date   | No       | The <code>endTimeSlice</code> is optional. If it is omitted, there is no constraint on the end of the cutoff period. If it is provided, the value must be greater than the value of cutoff. This is used to limit the items for which history is generated |

| Class              | Field Name        | Type    | Required | Details                                                                                                                                                                                                                                                                                     |
|--------------------|-------------------|---------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ItemHistoryRequest | userNameMask      | String  | No       | The optional userNameMask may be used to override the behavior setting named USERNAME_DISPLAY, for the duration of the execution of a single API call. This allows the developer to return the user names in a different format than the system-wide default stored in the behavior setting |
| ItemHistoryRequest | filters           | Array[] | No       | List of filters for the history                                                                                                                                                                                                                                                             |
| Field              | id                | boolean | No       |                                                                                                                                                                                                                                                                                             |
| Field              | name              | boolean | No       |                                                                                                                                                                                                                                                                                             |
| Field              | value             | boolean | No       |                                                                                                                                                                                                                                                                                             |
| Field              | childOfFieldId    | boolean | No       |                                                                                                                                                                                                                                                                                             |
| Field              | repeatingRowField | boolean | No       |                                                                                                                                                                                                                                                                                             |
| Field              | textAreaField     | boolean | No       |                                                                                                                                                                                                                                                                                             |
| Field              | typeOfUserField   | boolean | No       |                                                                                                                                                                                                                                                                                             |

## Output

| Class               | Name                     | Type    | Required | Details                                        |
|---------------------|--------------------------|---------|----------|------------------------------------------------|
| ItemHistoryResponse | success                  | boolean | Yes      | True is succeeded False if failed              |
| ItemHistoryResponse | returnCode               | String  | No       | See Appendix for details                       |
| ItemHistoryResponse | returnMessage            | String  | No       | Human readable message                         |
| ItemHistoryResponse | xml                      | String  | No       | The number of field records in the child array |
| ItemHistoryResponse | itemRecords              | Array[] | Yes      | An array of itemRecords objects                |
| ItemRecord          | numberOfItemRecordFields | int     | Yes      | The number of field records in the child array |
| ItemRecord          | itemRecordFields         | Array[] | Yes      | An array of ItemRecordField objects            |
| ItemRecordField     | fieldId                  | String  | Yes      | The id of the field                            |
| ItemRecordField     | fieldTitle               | String  | Yes      | The title of the field                         |
| ItemRecordField     | fieldValue               | String  | Yes      | The value of the field                         |
| ItemRecordField     | row                      | boolean | Yes      | The repeating row value                        |

## Example

```

public static void testGetItemAudits(EVItemServiceStub stub) {
    try {
        GetItemAuditsDocument reqEnvelope = GetItemAuditsDocument.Factory.newInstance();
        ItemHistoryRequest request = reqEnvelope.addNewGetItemAudits().addNewRequest();
        Calendar startCal = new GregorianCalendar();
        startCal.add(Calendar.DATE, -30);
        // look back 30 days ago
        Calendar endCal = new GregorianCalendar();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setStartTimeSlice(startCal);
        request.setEndTimeSlice(endCal);
        request.setReturnRawXML(true);
        GetItemAuditsResponseDocument resEnvelope = stub.getItemAudits(reqEnvelope);
        ItemHistoryResponse response = resEnvelope.getGetItemAuditsResponse().getReturn();
        if (response.isSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            System.out.println("XML Report:n" + response.getXml());
            for (ItemRecord record: response.getItemRecordsArray()) {
                System.out.println(" ++++++ ");
                System.out.println(" + New Record + ");
                for (ItemRecordField field: record.getItemRecordFieldsArray()) {
                    System.out.println(" + New Field + ");
                    System.out.println(" - Field Id: " + field.getFieldId());
                    System.out.println(" - Value: " + field.getFieldValue());
                    System.out.println(" - Title: " + field.getFieldTitle());
                    System.out.println(" - Row: " + field.getRow());
                }
            }
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}

```

## getItemFieldList

This action provides a list of all the available fields to the user. Note that all of ExtraView’s security is in force and an individual user will only see the fields to which he has access. Also note that there is no difference in the way that User Defined Fields (UDF’s) are shown than other fields. UDF’s are handled in a seamless way within the API.

### Input

| Class                   | Name     | Type   | Required | Details               |
|-------------------------|----------|--------|----------|-----------------------|
| GetItemFieldListRequest | userId   | String | Yes      | The callers user name |
| GetItemFieldListRequest | password | String | Yes      | The callers password  |

### Output

| Class                    | Name          | Type    | Required | Details                           |
|--------------------------|---------------|---------|----------|-----------------------------------|
| GetItemFieldListResponse | success       | boolean | Yes      | True is succeeded False if failed |
| GetItemFieldListResponse | returnCode    | String  | No       | See Appendix for details          |
| GetItemFieldListResponse | returnMessage | String  | No       | Human readable message            |
| GetItemFieldListResponse | <i>fields</i> | Array   | No       | A list of FieldBeans              |
| Field                    | id            | String  | Yes      |                                   |
| Field                    | name          | String  | Yes      |                                   |

|       |                   |         |    |
|-------|-------------------|---------|----|
| Field | value             | String  | No |
| Field | childOfFieldId    | String  | No |
| Field | repeatingRowField | boolean | No |
| Field | textAreaField     | boolean | No |
| Field | typeOfUserField   | boolean | No |

## Example

```
public static void testGetItemFieldList(EVItemServiceStub stub) {
    try {
        GetItemFieldListDocument reqEnvelope = GetItemFieldListDocument.Factory.newInstance();
        GetItemFieldListRequest request =
            reqEnvelope.addNewGetItemFieldList().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetItemFieldListResponseDocument resEnvelope = stub.getItemFieldList(reqEnvelope);
        GetItemFieldListServiceResponse response =
            resEnvelope.getGetItemFieldListResponse().getReturn();
        if (response.isSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getPing

This action returns a web services status independent of the ExtraView application.

### Input

There are no inputs for this action.

### Output

There are no outputs for this action. Independent of any user ID, password or any other parameter, this action confirms that a connection to the server exists and is functioning.

### Example

[http://SERVER\\_NAME/EV\\_NAME/services/EVSystemService/getPing?](http://SERVER_NAME/EV_NAME/services/EVSystemService/getPing?)

or

```
public static void systemStatus(EVSystemServiceStub stub) {
    try {
        GetPingResponseDocument response = stub.getPing();
        System.out.println(response.getGetPingResponse().getReturn());
    } catch (Exception e) {
        e.printStackTrace();
        System.out.println("nnn");
    }
}
```

## getReportHandle

The getReportHandle command returns all the report handles available to the calling user.

### Input

| Class | Name | Type | Required | Details |
|-------|------|------|----------|---------|
|-------|------|------|----------|---------|

|                        |          |        |     |                        |
|------------------------|----------|--------|-----|------------------------|
| GetReportHandleRequest | userId   | String | Yes | The caller's user name |
| GetReportHandleRequest | password | String | Yes | The caller's password  |

## Output

| Class                   | Name          | Type    | Required | Details                                       |
|-------------------------|---------------|---------|----------|-----------------------------------------------|
| GetReportHandleResponse | success       | boolean | Yes      | True is succeeded False if failed             |
| GetReportHandleResponse | returnCode    | String  | No       | See Appendix for details                      |
| GetReportHandleResponse | returnMessage | String  | No       | Human readable message                        |
| GetReportHandleResponse | reportHandles | Array[] | No       | The date the attachment was added to the item |
| ReportHandle            | reportId      | int     | Yes      | The report Id                                 |
| ReportHandle            | owner         | String  | Yes      | PUBLIC, PRIVATE or UNKNOWN                    |
| ReportHandle            | reportType    | String  | Yes      | See the Appendix on Report Type Table         |
| ReportHandle            | ReportTitle   | String  | Yes      | The title of the report                       |
| ReportHandle            | reportDesc    | String  | Yes      | The description of the report                 |

## Example

```
public static void testGetReportHandle(EVQueryServiceStub stub) {
    try {
        GetReportHandleDocument reqEnvelope = GetReportHandleDocument.Factory.newInstance();
        GetReportHandleRequest request = reqEnvelope.addNewGetReportHandle().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetReportHandleResponseDocument resEnvelope = stub.getReportHandle(reqEnvelope);
        GetReportHandleResponse response =
            resEnvelope.getGetReportHandleResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            for (ReportHandle reportHandle: response.getReportHandlesArray()) {
                System.out.println(" ++++++ ");
                System.out.println(" Report Handle: ");
                System.out.println(" - Report Id: " + reportHandle.getReportId());
                System.out.println(" - Owner: " + reportHandle.getOwner());
                System.out.println(" - Type: " + reportHandle.getReportType());
                System.out.println(" - Title: " + reportHandle.getReportTitle());
                System.out.println(" - Desc: " + reportHandle.getReportDesc());
            }
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

- [Add new comment](#)

## getUserByEmail

This action retrieves the first found user within ExtraView for a given email address. Note that if the same email address is used for different users, only the first is returned.

**Input**

| Class                 | Name     | Type   | Required | Details                                    |
|-----------------------|----------|--------|----------|--------------------------------------------|
| GetUserByEmailRequest | userId   | String | Yes      | The callers user name                      |
| GetUserByEmailRequest | password | String | Yes      | The callers password                       |
| GetUserByEmailRequest | email    | String | Yes      | The email address of the user your getting |

**Output**

| Class                  | Name          | Type    | Required | Details                           |
|------------------------|---------------|---------|----------|-----------------------------------|
| GetUserByEmailResponse | success       | boolean | Yes      | True is succeeded False if failed |
| GetUserByEmailResponse | returnCode    | String  | No       | See Appendix for details          |
| GetUserByEmailResponse | returnMessage | String  | No       | Human readable message            |
| GetUserByEmailResponse | user          | Object  | No       | A Single UserBean Object          |
| UserBean               | userId        | String  | Yes      |                                   |
| UserBean               | userPassword  | String  | No       |                                   |
| UserBean               | firstName     | String  | No       |                                   |
| UserBean               | lastName      | String  | No       |                                   |
| UserBean               | password      | String  | No       |                                   |
| UserBean               | email         | String  | No       |                                   |
| UserBean               | jobTitle      | String  | No       |                                   |
| UserBean               | companyName   | String  | No       |                                   |
| UserBean               | addressLine1  | String  | No       |                                   |
| UserBean               | addressLine2  | String  | No       |                                   |
| UserBean               | city          | String  | No       |                                   |
| UserBean               | state         | String  | No       |                                   |
| UserBean               | postalCode    | String  | No       |                                   |



|          |                 |        |    |
|----------|-----------------|--------|----|
| UserBean | country         | String | No |
| UserBean | workPhoneNumber | String | No |
| UserBean | homePhoneNumber | String | No |
| UserBean | cellPhoneNumber | String | No |
| UserBean | faxNumber       | String | No |
| UserBean | pageNumber      | String | No |

## Example

```
public static void testGetUserByEmail(EVUserServiceStub stub) {
    try {
        GetUserByEmailDocument reqEnvelope = GetUserByEmailDocument.Factory.newInstance();
        GetUserByEmailRequest request = reqEnvelope.addNewGetUserByEmail().addNewRequest();
        request.setEmail(ServiceClientHelper.generatedEmail);
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetUserByEmailResponseDocument resEnvelope = stub.getUserByEmail(reqEnvelope);
        GetUserByEmailResponse response =
            resEnvelope.getGetUserByEmailResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## getUserById

This action retrieves a user's details from ExtraView for the given user ID.

### Input

| Class              | Name      | Type   | Required | Details                              |
|--------------------|-----------|--------|----------|--------------------------------------|
| GetUserByIdRequest | userId    | String | Yes      | The callers user name                |
| GetUserByIdRequest | password  | String | Yes      | The callers password                 |
| GetUserByIdRequest | getUserId | String | Yes      | The user Id of the user your getting |

### Output

| Class               | Name          | Type    | Required | Details                           |
|---------------------|---------------|---------|----------|-----------------------------------|
| GetUserByIdResponse | success       | boolean | Yes      | True is succeeded False if failed |
| GetUserByIdResponse | returnCode    | String  | No       | See Appendix for details          |
| GetUserByIdResponse | returnMessage | String  | No       | Human readable message            |

|                     |                 |        |     |                          |
|---------------------|-----------------|--------|-----|--------------------------|
| GetUserByIdResponse | user            | Object | No  | A Single UserBean Object |
| UserBean            | userId          | String | Yes |                          |
| UserBean            | userPassword    | String | No  |                          |
| UserBean            | firstName       | String | No  |                          |
| UserBean            | lastName        | String | No  |                          |
| UserBean            | password        | String | No  |                          |
| UserBean            | email           | String | No  |                          |
| UserBean            | jobTitle        | String | No  |                          |
| UserBean            | companyName     | String | No  |                          |
| UserBean            | addressLine1    | String | No  |                          |
| UserBean            | addressLine2    | String | No  |                          |
| UserBean            | city            | String | No  |                          |
| UserBean            | state           | String | No  |                          |
| UserBean            | postalCode      | String | No  |                          |
| UserBean            | country         | String | No  |                          |
| UserBean            | workPhoneNumber | String | No  |                          |
| UserBean            | homePhoneNumber | String | No  |                          |
| UserBean            | cellPhoneNumber | String | No  |                          |
| UserBean            | faxNumber       | String | No  |                          |
| UserBean            | pagerNumber     | String | No  |                          |

### Example

```

public static void testGetUserById(EVUserServiceStub stub) {
    try {
        GetUserByIdDocument reqEnvelope = GetUserByIdDocument.Factory.newInstance();
        GetUserByIdRequest request = reqEnvelope.addNewGetUserById().addNewRequest();
        request.setGetUserId(ServiceClientHelper.generatedUserId);
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetUserByIdResponseDocument resEnvelope = stub.getUserById(reqEnvelope);
        GetUserByIdResponse response = resEnvelope.getGetUserByIdResponse().getReturn();
        if (response.getSuccess()) {

```

```

        System.out.println("success: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    } else {
        System.out.println("failure: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    }
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
}
}
}

```

## getUserFields

This action retrieves a set of user fields from within ExtraView.

### Input

| Class                | Name     | Type   | Required | Details               |
|----------------------|----------|--------|----------|-----------------------|
| GetUserFieldsRequest | userId   | String | Yes      | The callers user name |
| GetUserFieldsRequest | password | String | Yes      | The callers password  |

### Output

| Class                 | Name              | Type    | Required | Details                           |
|-----------------------|-------------------|---------|----------|-----------------------------------|
| GetUserFieldsResponse | success           | boolean | Yes      | True is succeeded False if failed |
| GetUserFieldsResponse | returnCode        | String  | No       | See Appendix for details          |
| GetUserFieldsResponse | returnMessage     | String  | No       | Human readable message            |
| GetUserFieldsResponse | <i>userFields</i> | Array[] | No       | A list of Field objects           |
| Field                 | id                | String  | Yes      |                                   |
| Field                 | name              | String  | No       |                                   |
| Field                 | value             | String  | No       |                                   |
| Field                 | childOfFieldId    | String  | No       |                                   |
| Field                 | repeatingRowField | boolean | No       |                                   |
| Field                 | textAreaField     | boolean | No       |                                   |
| Field                 | typeOfUserField   | boolean | No       |                                   |

### Example

```

public static void testGetUserFields(EVUserServiceStub stub) {
    try {
        GetUserFieldsDocument reqEnvelope = GetUserFieldsDocument.Factory.newInstance();
        GetUserFieldsRequest request = reqEnvelope.addNewGetUserFields().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
    }
}

```

```

    GetUserFieldsResponseDocument resEnvelope = stub.getUserFields(reqEnvelope);
    GetUserFieldsResponse response = resEnvelope.getGetUserFieldsResponse().getReturn();
    if (response.getSuccess()) {
        System.out.println("success: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    } else {
        System.out.println("failure: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    }
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
}
}

```

## getUserRoles

This action retrieves a list of the roles for an existing user within ExtraView.

### Input

| Class               | Name     | Type   | Required | Details               |
|---------------------|----------|--------|----------|-----------------------|
| GetUserRolesRequest | userId   | String | Yes      | The callers user name |
| GetUserRolesRequest | password | String | Yes      | The callers password  |

### Output

| Class                | Name          | Type    | Required | Details                           |
|----------------------|---------------|---------|----------|-----------------------------------|
| GetUserRolesResponse | success       | boolean | Yes      | True is succeeded False if failed |
| GetUserRolesResponse | returnCode    | String  | No       | See Appendix for details          |
| GetUserRolesResponse | returnMessage | String  | No       | Human readable message            |
| GetUserRolesResponse | roles         | Array[] | No       | A list of Role Objects            |
| Role                 | roleId        | String  | Yes      |                                   |
| Role                 | currentRole   | boolean | Yes      |                                   |
| Role                 | roleName      | String  | Yes      |                                   |

### Example

```

public static void testGetUserRoles(EVUserServiceStub stub) {
    try {
        GetUserRolesDocument reqEnvelope = GetUserRolesDocument.Factory.newInstance();
        GetUserRolesRequest request = reqEnvelope.addNewGetUserRoles().addNewRequest();
        request.setUserId(ServiceClientHelper.generatedUserId);
        request.setPassword(ServiceClientHelper.generatedPassword);
        GetUserRolesResponseDocument resEnvelope = stub.getUserRoles(reqEnvelope);
        return resEnvelope.getGetUserRolesResponse().getReturn();
    } if (response.getSuccess()) {
        System.out.println("success: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    } else {
        System.out.println("failure: [" + response.getReturnCode() + "] : " +
            response.getReturnMessage());
    }
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
}
}

```

```
}
}
```

## getVersion

This action returns the build information of ExtraView. The build information identifies the specific build and version number of the ExtraView server.

### Input

| Class             | Name     | Type   | Required | Details               |
|-------------------|----------|--------|----------|-----------------------|
| GetVersionRequest | userId   | String | Yes      | The callers user name |
| GetVersionRequest | password | String | Yes      | The callers password  |

### Output

| Class              | Name             | Type    | Required | Details                                                |
|--------------------|------------------|---------|----------|--------------------------------------------------------|
| GetVersionResponse | success          | boolean | Yes      | True is succeeded False if failed                      |
| GetVersionResponse | returnCode       | String  | No       | See Appendix for details                               |
| GetVersionResponse | returnMessage    | String  | No       | Human readable message                                 |
| GetVersionResponse | revision         | String  | Yes      | The revision of ExtraView                              |
| GetVersionResponse | modificationData | String  | Yes      | The last modification date of the ExtraView code base. |

### Example

```
public static void testGetVersion(EVSystemServiceStub stub) {
    try {
        // first we build the request...
        GetVersionDocument reqEnvelope = GetVersionDocument.Factory.newInstance();
        GetVersionRequest request = reqEnvelope.addNewGetVersion().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        GetVersionResponseDocument resEnvelope = stub.getVersion(reqEnvelope);
        GetVersionResponse response = resEnvelope.getGetVersionResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## insertItem

This API call inserts a new record into the ExtraView database. All fields are treated as optional, and all defined business rules are executed and checked before and after the record is inserted.

### Input

| Class             | Name   | Type   | Required | Details               |
|-------------------|--------|--------|----------|-----------------------|
| InsertItemRequest | userId | String | Yes      | The callers user name |

|                   |            |         |     |                                     |
|-------------------|------------|---------|-----|-------------------------------------|
| InsertItemRequest | password   | String  | Yes | The callers password                |
| InsertItemRequest | sendEmail  | boolean | Yes |                                     |
| InsertItemRequest | itemFields | Array[] | Yes | An array of ItemRecordField objects |
| ItemRecordField   | fieldId    | String  | Yes |                                     |
| ItemRecordField   | fieldTitle | String  | Yes |                                     |
| ItemRecordField   | fieldValue | String  | No  |                                     |
| ItemRecordField   | row        | int     | No  |                                     |

Optional parameters for handling document and image files:

| Class         | Name          | Type    | Required | Details                                  |
|---------------|---------------|---------|----------|------------------------------------------|
| ItemFileField | itemImages    | Array[] | No       | The array of image files and data        |
| ItemFileField | itemDocuments | Array[] | No       | The array of document files and data     |
| ItemFileField | ddName        | String  | No       | The data dictionary name of the file     |
| ItemFileField | fileName      | String  | No       | The target file name to be saved         |
| ItemFileField | file          | String  | No       | The file                                 |
| ItemFileField | description   | String  | No       | The description of the file              |
| ItemFileField | charset       | String  | No       | The charset of the file                  |
| ItemFileField | contentType   | String  | No       | The content type - e.g. "image/GIF"      |
| ItemFileField | rowId         |         |          | The repeating row Id                     |
| ItemFileField | rowNumber     | int     | No       | The row number - currently not supported |

## Output

| Class              | Name          | Type    | Required | Details                           |
|--------------------|---------------|---------|----------|-----------------------------------|
| InsertItemResponse | success       | boolean | Yes      | True is succeeded False if failed |
| InsertItemResponse | returnCode    | String  | No       | See Appendix for details          |
| InsertItemResponse | returnMessage | String  | No       | Human readable message            |

|                    |        |        |     |                            |
|--------------------|--------|--------|-----|----------------------------|
| InsertItemResponse | itemId | String | Yes | The Id of the insertd item |
|--------------------|--------|--------|-----|----------------------------|

## Note

If you encounter an error inserting large items with this command, the solution is to increase the WSDL package size - for example -

```
<readerQuotas maxDepth="2147483647" maxStringContentLength="2147483647" maxArrayLength="2147483647" maxBytesPerRead="2147483647" ma
```

In addition, you must increase the maximum size of the POST request that Tomcat application server will accept. Please see [here](#) for instructions.

## Example

```
public static void testInsertItem(EVItemServiceStub stub) {
    try {
        InsertItemDocument reqEnvelope = InsertItemDocument.Factory.newInstance();
        InsertItemRequest request = reqEnvelope.addNewInsertItem().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        List items = new ArrayList();
        ItemRecordField item = null;
        for (int i = 0; i < 4; i++) {
            item = ItemRecordField.Factory.newInstance();
            item.setRow(0);
            // no repeating rows for this example
            switch (i) {
                case 0:
                    item.setFieldId("status");
                    item.setFieldValue("NEW");
                    break;
                case 1:
                    item.setFieldId("assigned_to");
                    item.setFieldValue(ServiceClientHelper.generatedUserId);
                    break;
                case 2:
                    item.setFieldId("short_description");
                    item.setFieldValue("This is the short desc or title");
                    break;
                case 3:
                    item.setFieldId("description");
                    item.setFieldValue("this is the long desc");
                    break;
                default:
                    item.setFieldId("unknown");
                    item.setFieldValue("");
                    break;
            }
            items.add(item);
        }
        request.setItemFieldsArray(items.toArray(new ItemRecordField[items.size()]));
        request.setSendEmail(false);
        InsertItemResponseDocument resEnvelope = stub.insertItem(reqEnvelope);
        InsertItemResponse response = resEnvelope.getInsertItemResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## Example 2 - Handling Document & Image Fields

```
public static void testInsertItem(EVItemServiceStub stub) {
    try {
        File imageFile = new File("./test.GIF");
        DataInputStream dis = new DataInputStream(new FileInputStream(imageFile));
        BufferedReader br = new BufferedReader(new InputStreamReader(dis));
        List bFileList = new ArrayList();
        try {
            byte b;
            while (true) {
                b = dis.readByte();
                bFileList.add(b);
            }
        } catch (Exception e) { /* handle the EOF the lazy way. */
        }
        byte[] fileBytes = new byte[bFileList.size()];
        for (int i = 0; i < fileBytes.length; i++) {
            fileBytes[i] = bFileList.get(i);
        }
        List items = new ArrayList();
        ItemRecordField item = null;
        for (int i = 0; i < 4; i++) {
            item = ItemRecordField.Factory.newInstance();
            item.setRow(0);
            // no repeating rows for this example
        }
    }
}
```

```

switch (i) {
    case 0:
        item.setFieldId("status");
        item.setFieldValue("NEW");
        break;
    case 1:
        item.setFieldId("assigned_to");
        item.setFieldValue(ServiceClientHelper.generatedUserId);
        break;
    case 2:
        item.setFieldId("SHORT_DESCR");
        item.setFieldValue("This is the short desc or title");
        break;
    case 3:
        item.setFieldId("DESCRIPTION");
        item.setFieldValue("this is the long desc");
        break;
    default:
        item.setFieldId("unknown");
        item.setFieldValue("");
        break;
}
items.add(item);
}
request.setItemFieldsArray(items.toArray(new ItemRecordField[items.size()]));
request.setSendEmail(false);
List itemDocumentFields = new ArrayList();
ItemFileField document = ItemFileField.Factory.newInstance();
document.setCharset("UTF-8"); document.setContentType("image/gif");
document.setDescription("This is a test image file in a document field!");
document.setFile(fileBytes); document.setDdName("DOCUMENT");
document.setFileName(imageFile.getName()); itemDocumentFields.add(document);
request.setItemDocumentsArray(itemDocumentFields.toArray(new
    ItemFileField[itemDocumentFields.size()]));
InsertItemResponseDocument resEnvelope = stub.insertItem(reqEnvelope);
InsertItemResponse response = resEnvelope.getInsertItemResponse().getReturn();
if (response.getSuccess()) {
    System.out.println("success: [" + response.getReturnCode() + "] : " +
        response.getReturnMessage());
    System.out.println("Item [" + response.getItemId() + "] was created.");
    CREATED_Item_ID = response.getItemId();
} else {
    System.out.println("failure: [" + response.getReturnCode() + "] : " +
        response.getReturnMessage());
}
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("\n\n");
}
}
public static void testUpdateItem(EVItemServiceStub stub) {
    try {
        File imageFile = new File("./test.GIF");
        DataInputStream dis = new DataInputStream(new FileInputStream(imageFile));
        BufferedReader br = new BufferedReader(new InputStreamReader(dis));
        List bFileList = new ArrayList();
        try {
            byte b;
            while (true) {
                b = dis.readByte();
                bFileList.add(b);
            }
        } catch (Exception e) { /* handle the EOF the lazy way. */
        }
        byte[] fileBytes = new byte[bFileList.size()];
        for (int i = 0; i
            items = new ArrayList();
            ItemRecordField item = ItemRecordField.Factory.newInstance(); item.setRow(0);
            // no repeating rows for this example
            item.setFieldId("SHORT_DESCR");
            item.setFieldValue("This is the short desc or title -- changed!");
            items.add(item);
            request.setItemFieldsArray(items.toArray(new ItemRecordField[items.size()]));
            request.setSendEmail(false);
            List itemImageFields = new ArrayList();
            ItemFileField image = ItemFileField.Factory.newInstance();
            image.setCharset("UTF-8");
            image.setContentType("image/gif");
            image.setDescription("This is a test image file in a image field!");
            image.setFile(fileBytes);
            image.setDdName("IMAGE");
            image.setFileName(imageFile.getName());
            itemImageFields.add(image);
            request.setItemImagesArray(itemImageFields.toArray(new
                ItemFileField[itemImageFields.size()]));
            UpdateItemResponseDocument resEnvelope = stub.updateItem(reqEnvelope);
            UpdateItemResponse response =
                resEnvelope.getUpdateItemResponse().getReturn();
            if (response.getSuccess()) {
                System.out.println("success: [" + response.getReturnCode() + "] : " +
                    response.getReturnMessage());
                System.out.println("Item [" + response.getItemId() + "] was changed.");
                CREATED_Item_ID = response.getItemId();
            } else {
                System.out.println("failure: [" + response.getReturnCode() + "] : " +
                    response.getReturnMessage());
            }
        } catch (Exception e) {

```



```

        e.printStackTrace();
        System.err.println("\n\n\n");
    }
}

```

## insertUser

This action inserts a new user in the ExtraView database. The user must not exist in the database, else an error results.

### Input

| Class             | Name            | Type   | Required | Details                                  |
|-------------------|-----------------|--------|----------|------------------------------------------|
| InsertUserRequest | userId          | String | Yes      | The callers user name                    |
| InsertUserRequest | password        | String | Yes      | The callers password                     |
| InsertUserRequest | newUserId       | String | Yes      | The desired new user id (must be unique) |
| InsertUserRequest | newUserPassword | String | Yes      | The desired new password                 |
| InsertUserRequest | firstName       | String | Yes      | The new users first name                 |
| InsertUserRequest | lastName        | String | Yes      | The new users last name                  |
| InsertUserRequest | email           | String | Yes      | The new users email address              |
| InsertUserRequest | jobTitle        | String | No       | The new users job title                  |
| InsertUserRequest | companyName     | String | No       | The new users Company name               |
| InsertUserRequest | addressLine1    | String | No       | The new users address (line 1)           |
| InsertUserRequest | addressLine2    | String | No       | The new users address (line 2)           |
| InsertUserRequest | city            | String | No       | The new users city                       |
| InsertUserRequest | state           | String | No       | The new users state                      |
| InsertUserRequest | postalCode      | String | No       | The new users postal code                |
| InsertUserRequest | country         | String | No       | The new users country                    |
| InsertUserRequest | workPhoneNumber | String | No       | The new users work phone number          |
| InsertUserRequest | homePhoneNumber | String | No       | The new users home phone number          |
| InsertUserRequest | cellPhoneNumber | String | No       | The new users cell phone number          |
| InsertUserRequest | faxNumber       | String | No       | The new users fax phone number           |

|                   |            |        |    |                                  |
|-------------------|------------|--------|----|----------------------------------|
| InsertUserRequest | pageNumber | String | No | The new users pager phone number |
|-------------------|------------|--------|----|----------------------------------|

## Output

| Class              | Name          | Type    | Required | Details                           |
|--------------------|---------------|---------|----------|-----------------------------------|
| InsertUserResponse | success       | boolean | Yes      | True is succeeded False if failed |
| InsertUserResponse | returnCode    | String  | No       | See Appendix for details          |
| InsertUserResponse | returnMessage | String  | No       | Human readable message            |

## Example

```
public static void testInsertUser(EVUserServiceStub stub) {
    try {
        // first we build the request...
        InsertUserDocument reqEnvelope = InsertUserDocument.Factory.newInstance();
        InsertUserRequest request = reqEnvelope.addNewInsertUser().addNewParam0();
        request.setNewUserPassword(ServiceClientHelper.generatedPassword);
        request.setNewUserId(ServiceClientHelper.generatedUserId);
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setEmail(ServiceClientHelper.generatedEmail);
        request.setFirstName(ServiceClientHelper.generatedFirstName);
        request.setLastName(ServiceClientHelper.generatedLastName);
        InsertUserResponseDocument resEnvelope = stub.insertUser(reqEnvelope);
        InsertUserResponse response = resEnvelope.getInsertUserResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            System.out.println(
                "user [" + ServiceClientHelper.generatedUserId + "] user has been inserted.");
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## insertUserRole

This action creates a new user role and user mapping within ExtraView.

### Input

| Class                 | Name       | Type   | Required | Details                                    |
|-----------------------|------------|--------|----------|--------------------------------------------|
| InsertUserRoleRequest | userId     | String | Yes      | The callers user name                      |
| InsertUserRoleRequest | password   | String | Yes      | The callers password                       |
| InsertUserRoleRequest | roleId     | String | Yes      | The role id you want to add the user too   |
| InsertUserRoleRequest | roleUserId | String | Yes      | The user id you want to insert in the role |

### Output

| Class | Name | Type | Required | Details |
|-------|------|------|----------|---------|
|-------|------|------|----------|---------|

|                        |               |         |     |                                   |
|------------------------|---------------|---------|-----|-----------------------------------|
| InsertUserRoleResponse | success       | boolean | Yes | True is succeeded False if failed |
| InsertUserRoleResponse | returnCode    | String  | No  | See Appendix for details          |
| InsertUserRoleResponse | returnMessage | String  | No  | Human readable message            |

## Example

```
public static void testInsertUserRole(EVUserServiceStub stub) {
    try {
        InsertUserRoleDocument reqEnvelope = InsertUserRoleDocument.Factory.newInstance();
        InsertUserRoleRequest request = reqEnvelope.addNewInsertUserRole().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setRoleUserId(ServiceClientHelper.generatedUserId);
        request.setRoleId(ServiceClientHelper.ADMIN_GROUP);
        InsertUserRoleResponseDocument resEnvelope = stub.insertUserRole(reqEnvelope);
        InsertUserRoleResponse response =
            resEnvelope.getInsertUserRoleResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## itemExists

This function does a check to see if the item provided in itemId exists in ExtraView. It returns a simple Boolean result.

### Input

| Class             | Name      | Type   | Required | Details                                                                                                                      |
|-------------------|-----------|--------|----------|------------------------------------------------------------------------------------------------------------------------------|
| ItemExistsRequest | userId    | String | Yes      | The callers user name                                                                                                        |
| ItemExistsRequest | password  | String | Yes      | The callers password                                                                                                         |
| ItemExistsRequest | itemId    | int    | ?        | The int item id. This field is optional if itemIdStr is given, else it is required. It is recommended that you use itemIdStr |
| ItemExistsRequest | itemIdStr | String | ?        | The String item Id. This field is optional if itemId is used. It is recommended that you use itemIdStr                       |

### Output

| Class              | Name          | Type    | Required | Details                           |
|--------------------|---------------|---------|----------|-----------------------------------|
| ItemExistsResponse | success       | boolean | Yes      | True is succeeded False if failed |
| ItemExistsResponse | returnCode    | String  | No       | See Appendix for details          |
| ItemExistsResponse | returnMessage | String  | No       | Human readable message            |
| ItemExistsResponse | exists        | boolean | Yes      | The item in XML format            |

## Example

```

public static void testItemExists(EVItemServiceStub stub) {
    try {
        ItemExistsDocument reqEnvelope = ItemExistsDocument.Factory.newInstance();
        ItemExistsRequest request = reqEnvelope.addNewItemExists().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setItemId(CREATED_ISSUE_ID);
        ItemExistsResponseDocument resEnvelope = stub.itemExists(reqEnvelope);
        ItemExistsResponse response = resEnvelope.getItemExistsResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}

```

## setCurrentUserRole

This action sets the role of the current user.

### Input

| Class                     | Name     | Type   | Required | Details                      |
|---------------------------|----------|--------|----------|------------------------------|
| SetCurrentUserRoleRequest | userId   | String | Yes      | The callers user name        |
| SetCurrentUserRoleRequest | password | String | Yes      | The callers password         |
| SetCurrentUserRoleRequest | roleId   | String | Yes      | The new current user role id |

### Output

| Class                      | Name          | Type    | Required | Details                           |
|----------------------------|---------------|---------|----------|-----------------------------------|
| SetCurrentUserRoleResponse | success       | boolean | Yes      | True is succeeded False if failed |
| SetCurrentUserRoleResponse | returnCode    | String  | No       | See Appendix for details          |
| SetCurrentUserRoleResponse | returnMessage | String  | No       | Human readable message            |

## Example

```

public static void testUpdateUserRole(EVUserServiceStub stub) {
    try {
        GetUserRolesResponse userRoleResponse = getUserRoles(stub);
        if (userRoleResponse.getSuccess()) {
            SetCurrentUserRoleDocument reqEnvelope =
                SetCurrentUserRoleDocument.Factory.newInstance();
            SetCurrentUserRoleRequest request =
                reqEnvelope.addNewSetCurrentUserRole().addNewRequest();
            request.setUserId(ServiceClientHelper.generatedUserId);
            request.setPassword(ServiceClientHelper.generatedPassword);
            request.setRoleId(userRoleResponse.getRolesArray()[0].getRoleId());
            SetCurrentUserRoleResponseDocument resEnvelope =
                stub.setCurrentUserRole(reqEnvelope);
            SetCurrentUserRoleResponse response =
                resEnvelope.getSetCurrentUserRoleResponse().getReturn();
            if (response.getSuccess()) {
                System.out.println("success: [" + response.getReturnCode() + "] : " +
                    response.getReturnMessage());
            } else {
                System.out.println("failure: [" + response.getReturnCode() + "] : " +
                    response.getReturnMessage());
            }
        }
    }
}

```

```

    }
  } catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
  }
}

```

## setWorkingProjectArea

This action sets the Business Area and Project for the current user within the database.

### Input

| Class                        | Name      | Type    | Required | Details                                                      |
|------------------------------|-----------|---------|----------|--------------------------------------------------------------|
| SetWorkingProjectAreaRequest | userId    | String  | Yes      | The callers user name                                        |
| SetWorkingProjectAreaRequest | password  | String  | Yes      | The callers password                                         |
| SetWorkingProjectAreaRequest | areaId    | Integer | Yes      | The area id to be set as the current area for the user       |
| SetWorkingProjectAreaRequest | projectId | Integer | Yes      | The project id to be set as the current project for the user |

### Output

| Class                         | Name          | Type    | Required | Details                           |
|-------------------------------|---------------|---------|----------|-----------------------------------|
| SetWorkingProjectAreaResponse | success       | boolean | Yes      | True is succeeded False if failed |
| SetWorkingProjectAreaResponse | returnCode    | String  | No       | See Appendix for details          |
| SetWorkingProjectAreaResponse | returnMessage | String  | No       | Human readable message            |

### Example

```

public static void testSetWorkingProjectArea(EVSystemServiceStub stub) {
  try {
    SetWorkingProjectAreaDocument reqEnvelope =
      SetWorkingProjectAreaDocument.Factory.newInstance();
    SetWorkingProjectAreaRequest request =
      reqEnvelope.addNewSetWorkingProjectArea().addNewParam0();
    request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
    request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
    request.setAreaId(0);
    // GLOBAL AREA
    request.setProjectId(0);
    // MASTER PROJECT
    SetWorkingProjectAreaResponseDocument resEnvelope =
      stub.setWorkingProjectArea(reqEnvelope);
    SetWorkingProjectAreaResponse response =
      resEnvelope.getSetWorkingProjectAreaResponse().getReturn();
    if (response.getSuccess()) {
      System.out.println("success: [" + response.getReturnCode() + "] : " +
        response.getReturnMessage());
    } else {
      System.out.println("failure: [" + response.getReturnCode() + "] : " +
        response.getReturnMessage());
    }
  } catch (Exception e) {
    e.printStackTrace();
    System.err.println("nnn");
  }
}

```

## updateItem

This API call updates an existing record in the ExtraView database. Except for the itemId, all fields are treated as optional. However, all defined business rules are executed and checked before and after the record is updated, therefore fields that are required or become required due to the rules must be provided.

**Input**

| Class             | Name       | Type    | Required | Details                                                                                                                      |
|-------------------|------------|---------|----------|------------------------------------------------------------------------------------------------------------------------------|
| UpdateItemRequest | userId     | String  | Yes      | The callers user name                                                                                                        |
| UpdateItemRequest | password   | String  | Yes      | The callers password                                                                                                         |
| UpdateItemRequest | itemId     | int     | ?        | The int item id. This field is optional if itemIdStr is given, else it is required. It is recommended that you use itemIdStr |
| UpdateItemRequest | itemIdStr  | String  | ?        | The String item Id. This field is optional if itemId is used. It is recommended that you use itemIdStr                       |
| UpdateItemRequest | sendEmail  | boolean | Yes      |                                                                                                                              |
| UpdateItemRequest | itemFields | Array[] | Yes      |                                                                                                                              |
| ItemRecordField   | fieldId    | String  | Yes      |                                                                                                                              |
| ItemRecordField   | fieldTitle | String  | Yes      |                                                                                                                              |
| ItemRecordField   | fieldValue | String  | No       |                                                                                                                              |
| ItemRecordField   | row        | Integer | No       |                                                                                                                              |

Optional parameters for handling document and image files:

| Class         | Name          | Type    | Required | Details                              |
|---------------|---------------|---------|----------|--------------------------------------|
| ItemFileField | itemImages    | Array[] | No       | The array of image files and data    |
| ItemFileField | itemDocuments | Array[] | No       | The array of document files and data |
| ItemFileField | ddName        | String  | No       | The data dictionary name of the file |
| ItemFileField | fileName      | String  | No       | The target file name to be saved     |
| ItemFileField | file          | String  | No       | The file                             |
| ItemFileField | description   | String  | No       | The description of the file          |
| ItemFileField | charset       | String  | No       | The charset of the file              |
| ItemFileField | contentType   | String  | No       | The content type - e.g. "image/GIF"  |
| ItemFileField | rowId         |         |          | The repeating row Id                 |

|               |           |     |    |                                          |
|---------------|-----------|-----|----|------------------------------------------|
| ItemFileField | rowNumber | int | No | The row number - currently not supported |
|---------------|-----------|-----|----|------------------------------------------|

## Output

| Class              | Name          | Type    | Required | Details                                                     |
|--------------------|---------------|---------|----------|-------------------------------------------------------------|
| UpdateItemResponse | success       | boolean | Yes      | True is succeeded False if failed                           |
| UpdateItemResponse | returnCode    | String  | No       | See Appendix for details                                    |
| UpdateItemResponse | returnMessage | String  | No       | Human readable message                                      |
| UpdateItemResponse | itemId        | int     | Yes      | The int value of the ID of the inserted item                |
| UpdateItemResponse | itemIdStr     | String  | Yes      | The recommended field to obtain the ID of the inserted item |

## Example

```
public static void testUpdateItem(EVItemServiceStub stub) {
    try {
        UpdateItemDocument reqEnvelope = UpdateItemDocument.Factory.newInstance();
        UpdateItemRequest request = reqEnvelope.addNewUpdateItem().addNewRequest();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        List items = new ArrayList();
        ItemRecordField item = null;
        for (int i = 0; i < 4; i++) {
            item = ItemRecordField.Factory.newInstance();
            item.setRow(0);
            // no repeating rows for this example
            switch (i) {
                case 0:
                    item.setFieldId("status");
                    item.setFieldValue("NEW");
                    break;
                case 1:
                    item.setFieldId("assigned_to");
                    item.setFieldValue(ServiceClientHelper.generatedUserId);
                    break;
                case 2:
                    item.setFieldId("short_description");
                    item.setFieldValue("This is the short desc or title");
                    break;
                case 3:
                    item.setFieldId("description");
                    item.setFieldValue("this is the long desc");
                    break;
                default:
                    item.setFieldId("unknown");
                    item.setFieldValue("");
                    break;
            }
            items.add(item);
        }
        request.setItemFieldsArray(items.toArray(new ItemRecordField[items.size()]));
        request.setSendEmail(false);
        UpdateItemResponseDocument resEnvelope = stub.updateItem(reqEnvelope);
        UpdateItemResponse response = resEnvelope.getUpdateItemResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## Example 2 - Handling Document & Image Fields

```
public static void testInsertItem(EVItemServiceStub stub) {
    try {
        File imageFile = new File("./test.GIF");
        DataInputStream dis = new DataInputStream(new FileInputStream(imageFile));
        BufferedReader br = new BufferedReader(new InputStreamReader(dis));
    }
}
```

```

List bFileList = new ArrayList();
try {
    byte b;
    while (true) {
        b = dis.readByte();
        bFileList.add(b);
    }
} catch (Exception e) { /* handle the EOF the lazy way. */
}
byte[] fileBytes = new byte[bFileList.size()];
for (int i = 0; i < items = new ArrayList(); ItemRecordField item = null;
for (int i = 0; i < 4; i++) {
    item = ItemRecordField.Factory.newInstance();
    item.setRow(0);
    // no repeating rows for this example
    switch (i) {
        case 0:
            item.setFieldId("status");
            item.setFieldValue("NEW");
            break;
        case 1:
            item.setFieldId("assigned_to");
            item.setFieldValue(ServiceClientHelper.generatedUserId);
            break;
        case 2:
            item.setFieldId("SHORT_DESCR");
            item.setFieldValue("This is the short desc or title");
            break;
        case 3:
            item.setFieldId("DESCRIPTION");
            item.setFieldValue("this is the long desc");
            break;
        default:
            item.setFieldId("unknown");
            item.setFieldValue("");
            break;
    }
    items.add(item);
}
request.setItemFieldsArray(items.toArray(new ItemRecordField[items.size()]));
request.setSendEmail(false);
List itemDocumentFields = new ArrayList();
ItemFileField document = ItemFileField.Factory.newInstance();
document.setCharset("UTF-8");
document.setContentType("image/gif");
document.setDescription("This is a test image file in a document field!");
document.setFile(fileBytes); document.setDdName("DOCUMENT");
document.setFileName(imageFile.getName());
itemDocumentFields.add(document);
request.setItemDocumentsArray(itemDocumentFields.toArray(new
    ItemFileField[itemDocumentFields.size()]));
InsertItemResponseDocument resEnvelope = stub.insertItem(reqEnvelope);
InsertItemResponse response = resEnvelope.getInsertItemResponse().getReturn();
if (response.getSuccess()) {
    System.out.println("success: [" + response.getReturnCode() + "] : " +
        response.getReturnMessage());
    System.out.println("Item [" + response.getItemId() + "] was created.");
    CREATED_Item_ID = response.getItemId();
} else {
    System.out.println("failure: [" + response.getReturnCode() + "] : " +
        response.getReturnMessage());
}
} catch (Exception e) {
    e.printStackTrace();
    System.err.println("\n\n");
}
}
public static void testUpdateItem(EVItemServiceStub stub) {
    try {
        File imageFile = new File("./test.GIF");
        DataInputStream dis = new DataInputStream(new FileInputStream(imageFile));
        BufferedReader br = new BufferedReader(new InputStreamReader(dis));
        List bFileList = new ArrayList();
        try {
            byte b;
            while (true) {
                b = dis.readByte();
                bFileList.add(b);
            }
        } catch (Exception e) { /* handle the EOF the lazy way. */
        }
        byte[] fileBytes = new byte[bFileList.size()];
        for (int i = 0; i
            items = new ArrayList();
            ItemRecordField item = ItemRecordField.Factory.newInstance();
            item.setRow(0);
            // no repeating rows for this example
            item.setFieldId("SHORT_DESCR");
            item.setFieldValue("This is the short desc or title -- changed!");
            items.add(item);
            request.setItemFieldsArray(items.toArray(new ItemRecordField[items.size()]));
            request.setSendEmail(false);
            List itemImageFields = new ArrayList();
            ItemFileField image = ItemFileField.Factory.newInstance();
            image.setCharset("UTF-8");
            image.setContentType("image/gif");
            image.setDescription("This is a test image file in a image field!");
            image.setFile(fileBytes);

```



```

        image.setDdName("IMAGE");
        image.setFileName(imageFile.getName());
        itemImageFields.add(image);
        request.setItemImagesArray(itemImageFields.toArray(new
            ItemFileField[itemImageFields.size()]));
        UpdateItemResponseDocument resEnvelope = stub.updateItem(reqEnvelope);
        UpdateItemResponse response =
            resEnvelope.getUpdateItemResponse().getReturn();
        if (response.isSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
            System.out.println("Item [" + response.getItemId() + "] was changed.");
            CREATED_Item_ID = response.getItemId();
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("\n\n\n");
    }
}

```

## updateUser

This action allows the user to update the attributes of an existing user within ExtraView.

### Input

| Class             | Name         | Type   | Required | Details                                  |
|-------------------|--------------|--------|----------|------------------------------------------|
| UpdateUserRequest | userId       | String | Yes      | The callers user name                    |
| UpdateUserRequest | password     | String | Yes      | The callers password                     |
| UpdateUserRequest | updateUserId | String | Yes      | The desired new user id (must be unique) |
| UpdateUserRequest | newPassword  | String | No       | The desired new password                 |
| UpdateUserRequest | oldPassword  | String | No       | The users old password                   |
| UpdateUserRequest | firstName    | String | No       | The users first name                     |
| UpdateUserRequest | lastName     | String | No       | The users last name                      |
| UpdateUserRequest | email        | String | No       | The users email address                  |
| UpdateUserRequest | jobTitle     | String | No       | The users job title                      |
| UpdateUserRequest | companyName  | String | No       | The users Company name                   |
| UpdateUserRequest | addressLine1 | String | No       | The users address (line 1)               |
| UpdateUserRequest | addressLine2 | String | No       | The users address (line 2)               |
| UpdateUserRequest | city         | String | No       | The users city                           |
| UpdateUserRequest | state        | String | No       | The users state                          |
| UpdateUserRequest | postalCode   | String | No       | The users postal code                    |

|                   |                 |        |    |                              |
|-------------------|-----------------|--------|----|------------------------------|
| UpdateUserRequest | country         | String | No | The users country            |
| UpdateUserRequest | workPhoneNumber | String | No | The users work phone number  |
| UpdateUserRequest | homePhoneNumber | String | No | The users home phone number  |
| UpdateUserRequest | cellPhoneNumber | String | No | The users cell phone number  |
| UpdateUserRequest | faxNumber       | String | No | The users fax phone number   |
| UpdateUserRequest | pagerNumber     | String | No | The users pager phone number |

## Output

| Class              | Name          | Type    | Required | Details                           |
|--------------------|---------------|---------|----------|-----------------------------------|
| UpdateUserResponse | success       | boolean | Yes      | True is succeeded False if failed |
| UpdateUserResponse | returnCode    | String  | No       | See Appendix for details          |
| UpdateUserResponse | returnMessage | String  | No       | Human readable message            |

## Example

```
public static void testUpdateUser(EVUserServiceStub stub) {
    try {
        UpdateUserDocument reqEnvelope = UpdateUserDocument.Factory.newInstance();
        UpdateUserRequest request = reqEnvelope.addNewUpdateUser().addNewParam0();
        request.setUserId(ServiceClientHelper.ADMIN_USER_ID);
        request.setPassword(ServiceClientHelper.ADMIN_PASSWORD);
        request.setUpdateUserId(ServiceClientHelper.generatedUserId);
        request.setOldPassword(ServiceClientHelper.generatedPassword);
        request.setNewPassword("UP" + ServiceClientHelper.generatedPassword);
        UpdateUserResponseDocument resEnvelope = stub.updateUser(reqEnvelope);
        UpdateUserResponse response = resEnvelope.getUpdateUserResponse().getReturn();
        if (response.getSuccess()) {
            System.out.println("success: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());

            System.out.println
                ("user [" + ServiceClientHelper.generatedUserId + "] user has been inserted.");
        } else {
            System.out.println("failure: [" + response.getReturnCode() + "] : " +
                response.getReturnMessage());
        }
    } catch (Exception e) {
        e.printStackTrace();
        System.err.println("nnn");
    }
}
```

## Sample .Net Client

A full sample client program, developed in Microsoft Visual Studio 8, is provided as part of the implementation. The full source code is available. Every action described in this guide is implemented within the client program. The program has a single configuration file. As an example, this configuration file provides the path to the ExtraView server.

Extra View Windows Web Service Tester

User Id  Password

Return Code: SUCCESS Return Message:

Query Services | Item Services | User Services | System Services

Execute Report | Execute Item Search | Get Field List | Execute User Search

Page Length:   
 Record Start:   
 Record Count:   
 Persist Handle:   
 Return Raw XML:  Yes  
 Report Id:

### Results

| Record Index | Field Id        | Field Value            | Field Title    | Repeating Row # |
|--------------|-----------------|------------------------|----------------|-----------------|
| 0            | ID              | 10645                  | ID #           | 0               |
| 0            | SHORT_DESCR     |                        | Title          | 0               |
| 0            | STATUS          | New                    | Status         | 0               |
| 0            | AREA            | * Global Area *        | Business Area  | 0               |
| 0            | DATE_CREATED    | Sep 26, 2008           | Date Created   | 0               |
| 0            | TIMESTAMP       | Sep 26, 2008           | Last Modified  | 0               |
| 0            | DAYS_IN_STAT... | 3                      | Days in Status | 0               |
| 0            | DESCRIPTION     | this is the long de... | Description    | 0               |
| 0            | PROJECT         | * Master Project *     | Project        | 0               |
| 0            | ORIGINATOR      | Thorington, Brent      | Originator     | 0               |

```
<?xml version="1.0" encoding="UTF-8"?><EXTRAVIEW_RESULTS totalrecs="363"><PROBLEM_RECORD><ID TITLE="ID #"><![CDATA[10645]]></ID><SHORT_DESCR TITLE="Title"><![CDATA[]]></SHORT_DESCR><STATUS TITLE="Status"><![CDATA[New]]></STATUS><AREA TITLE="Business Area"><![CDATA[* Global Area *]]></AREA><DATE_CREATED TITLE="Date Created"><![CDATA[Sep 26, 2008]]></DATE_CREATED><TIMESTAMP TITLE="Last Modified"><![CDATA[Sep 26, 2008]]></TIMESTAMP><DAYS_IN_STATUS TITLE="Days in Status"><![CDATA[3]]></DAYS_IN_STATUS><DESCRIPTION TITLE="Description"><![CDATA[this is the long desc]]></DESCRIPTION><PROJECT TITLE="Project"><![CDATA[* Master Project *]]></PROJECT><ORIGINATOR TITLE="Originator"><![CDATA[Thorington, Brent]]></ORIGINATOR><LAST_CHANGE_USER TITLE="Last Changed By"><![CDATA[Thorington, Brent]]></LAST_CHANGE_USER><DAYS_OPEN TITLE="Days
```

Sample interface utilizing ExtraView Web Services

User Id: brent Password: [masked] Return Code: SUCCESS Return Message: [empty]

Query Services Item Services User Services System Services

Insert Item Delete Item Update Item Get Item Item Exists Get Item Attachments Get Item Field List

Item Id: 10645 Return Raw XML:  Yes Call Service

| fieldId         | fieldTitle      | fieldValue             | row | rowSpecified                        |
|-----------------|-----------------|------------------------|-----|-------------------------------------|
| ID              | ID #            | 10645                  | 0   | <input checked="" type="checkbox"/> |
| SHORT_DESCR     | Title           |                        | 0   | <input checked="" type="checkbox"/> |
| STATUS          | Status          | New                    | 0   | <input checked="" type="checkbox"/> |
| AREA            | Business Area   | * Global Area *        | 0   | <input checked="" type="checkbox"/> |
| DATE_CREATED    | Date Created    | Sep 26, 2008           | 0   | <input checked="" type="checkbox"/> |
| TIMESTAMP       | Last Modified   | Sep 26, 2008           | 0   | <input checked="" type="checkbox"/> |
| DAYS_IN_STAT... | Days in Status  | 3                      | 0   | <input checked="" type="checkbox"/> |
| DESCRIPTION     | Description     | this is the long de... | 0   | <input checked="" type="checkbox"/> |
| PROJECT         | Project         | * Master Project *     | 0   | <input checked="" type="checkbox"/> |
| ORIGINATOR      | Originator      | Thorington, Brent      | 0   | <input checked="" type="checkbox"/> |
| LAST_CHANGE...  | Last Changed By | Thorington, Brent      | 0   | <input checked="" type="checkbox"/> |

```
<?xml version="1.0" encoding="UTF-8"?>
<PROBLEM_RECORD>
<ID TITLE="ID #"><![CDATA[10645]]></ID>
<SHORT_DESCR TITLE="Title"><![CDATA[]]></SHORT_DESCR>
<STATUS TITLE="Status"><![CDATA[New]]></STATUS>
<AREA TITLE="Business Area"><![CDATA[* Global Area *]]></AREA>
<DATE_CREATED TITLE="Date Created"><![CDATA[Sep 26, 2008]]></DATE_CREATED>
<TIMESTAMP TITLE="Last Modified"><![CDATA[Sep 26, 2008]]></TIMESTAMP>
<DAYS_IN_STATUS TITLE="Days in Status"><![CDATA[3]]></DAYS_IN_STATUS>
```

Example service to retrieve an item from the database displaying the results

## Appendix

### Return Codes

| Return Code  | Definition                                                                                                                                      |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| SUCCESS      | The web service successfully ran without errors or warnings                                                                                     |
| FAILED       | The web service failed to run successfully                                                                                                      |
| MULTI_FAILED | Multiple failures occurred (for batch runs)                                                                                                     |
| WARNING      | The web service got unusual results from ExtraView and may or may not have ran successfully                                                     |
| UNKNOWN      | The web service was unable to determine the correct status to be returned for the run. Generally, this should be treated the same as FAILED run |