

## Bravura Security Fabric

## **Remote API**

- ✓ Hitachi ID Bravura Pass
- ✓ Hitachi ID Bravura Privilege
- ✓ Hitachi ID Bravura Identity
- ✓ Hitachi ID Bravura Group

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#### **DISCLAIMER**

Although every effort has been made to ensure that the information in this manual is accurate, some information may be inconsistent with the most current software release.

In some cases, information may only be relevant to products you do not have installed.

For assistance with installation and configuration, please contact support@Hitachi-ID.com.

**About the Documentation** 

# 1

## 1.1 This document

This chapter provides information about the *Hitachi ID Bravura Security Fabric* remote API (API Service (idapi)), and the available interfaces.

The API Service provides functionality to support all *Bravura Security Fabric* applications; as such, only some of the functionality contained in this reference manual may apply to the particular application you are using.

## 1.2 Conventions

This document uses the following conventions:

This information	displayed in
Variable text (substituted for your own text)	<angle brackets=""></angle>
Non-text keystrokes – for example, [Enter] key on a keyboard.	[brackets]
Terms unique to Hitachi ID Bravura Security Fabric	italics
Button names, text fields, and menu items	boldface
Web pages (names)	italics and boldface
Literal text, as typed into configuration files, batch files, command prompts, and data entry fields	monospace font
Wrapped lines of literal text (indicated by the $\rightarrow$ character)	Write this string as a →single line of text.
Hypertext links – click the link to jump to a section in this document or a web site	Purple text
External document – click the link to jump to a section in another document. The links only work if the documents are kept in the relative directory path.	Magenta text

## 1.3 Feedback and help

If you have feedback about this document or wish to report an omission or error, please contact doc-feedback@Hitachi-ID.com.

If you require technical assistance with *Hitachi ID Bravura Security Fabric*, contact support@Hitachi-ID.com.

API Service 2

The API Service (idapi) enables client programs to access *Bravura Security Fabric* workflow and provisioning features programmatically. Client programs communicate with the service using:

- SOAP (Simple Object Access Protocol)
   Some organizations use the SOAP API to build their own customized front-end to Hitachi ID Bravura Security Fabric.
- PSLANG functions
   Bravura Security Fabric plugins can use PSLANG to retrieve additional information about users, resources, and requests from the API Service (idapi).

The API Service is dependent on the Database Service (iddb). If you restart the database service, you must restart the API Service. See <u>Database Service</u> (iddb) in the Bravura Security Fabric *Reference Manual* for information about **iddb** and stopping the service.

## 2.1 Configuring the API Service

The service is automatically installed and started on the *Hitachi ID Bravura Security Fabric* server during setup.

You can modify the following parameters related to the API Service (idapi) on the **Service information** page:

Table 2.1: idapi service options

Option	Description
Timeout for connection in seconds	The timeout to use for connections. The default is 60 seconds.

Table 2.2: idapi command-line arguments

Argument	Description
-h	Displays usage information.
-V	Displays version number only.
-config	Displays service configuration information.
-server	Run the service in server mode.
-start	Starts the service.
-stop	Stops the server/service.

## 2.2 Troubleshooting

The following common error messages may occur while installing or starting a service program:

The account name is invalid or does not exist Check that the account name and password are valid for the server on which the program is to be installed.

The service did not start due to logon failure Check that the user has the right to logon as a service.

Warning: Login failed: invalid password specified for [\_API\_USER ] Check to see if a password has been set for the \_API\_USER administrator and if the value for Allowed network addresses for remote API access has been modified. If an api user is required for remote access (such as the UNIX Trigger for example), ensure that an alternate administrator is configured for user for the remote connections.

**Note:** It is recommended that you use the same local user ID and password to run all services that you configured during installation.

SOAP API

This chapter provides information about using the SOAP (Simple Object Access Protocol) API, as well as a complete function reference for the API.

There are two options for accessing the SOAP interface:

- Using the API SOAP Service (idapisoap) with WWS (p6)
- Using the IdapiService with IIS (p9)

## 3.1 SOAP API Support with WWS

The API SOAP Service (idapisoap) provides access to the *Bravura Security Fabric* API Service (idapi) with the WWS web service API. It is installed and started on the *Hitachi ID Bravura Security Fabric* server during setup.

The API SOAP Service (idapisoap) requires:

- Windows Server 2012, or Windows Server 2012 R2
- Microsoft .NET Framework 4.5+

The API SOAP Service is dependent on the API Service (idapi). The PSLang API, IIS.NET API, and WWS API call into this service.

## 3.1.1 Configuring the API SOAP Service

The service is automatically installed and started on the *Hitachi ID Bravura Security Fabric* server during setup.

You can modify the following parameters related to the API SOAP Service on the **Service information** page:

Table 3.1: idapisoap service options

Option	Description
Endpoints for the IDAPI SOAP native service	The URL that the API SOAP Service will listen in on. An optional port can be appended to the host and preceded by a colon. Multiple endpoints can be defined in a comma separated list. To secure the endpoint, configure it to listen on HTTPS.
Use system setting:	Will be set to the following:
	<pre>http://<ip>/default/idapi,http://localhost/default/idapi, http://<ip-fqdn>/default/idapi.</ip-fqdn></ip></pre>

**Note:** The "server" URL fragment has to be the IP, hostname or FQDN (fully qualified domain name) of the server. If the connection is secured with TLS (https protocol), only a FQDN listed in the TLS server certificate used on the IIS server will allow a secure remote connection.

Table 3.2: idapisoap command-line arguments

Argument	Description
-h	Displays usage information.
-V	Displays version number only.
-binding < binding>	Specify the binding type:  0 - basicHttpBinding  1 - wsHttpBinding (default)
-config	Displays service configuration information
-endpoint < endpoint >	The endpoint that this SOAP service listens on
-mextype < mextype>	The metadata exchange method:  0 - None  1 - MexHttpGet  2 - Mex (only for wsHttpbinding)  4 - HttpGet (default)
-server	Run the service in server mode.
-start	Starts the service.
-stop	Stops the server/service.

To configure wsbinding and mex, set the service like this:

```
idapisoap -binding 1 -mextype 2
```

where the API service class can be generated from <endpoint>; for example, http://<IP or fqdn>/hiim/idapi.

To configure httpbinding and HttpGet, set the service like this:

```
idapisoap -binding 0 -mextype 4
```

where API service class can be generated from the WSDL < endpoint > /wsdl; for example, http://<IP or fqdn>/hiim/idapi/wsdl.

Note: Changing the SOAP connection type by using the "binding" and "mextype" arguments is only required if the remote SOAP tooling used requires it. Do not change the default connection type if testing the collection of the WSDL using a browser, otherwise you will receive a generic server error (HTTP 500) instead of the WSDL.

#### 3.1.2 Metadata exchange

The API SOAP Service has a couple of methods of exchanging metadata. When using the default httpget, the metadata exchange URL is:

```
service_endpoint/wsdl
```

#### For example:

```
https://<IP or fqdn>/INST/idapi/wsdl
```

If the API SOAP Service uses MexHttpGet, the URL is:

```
https://<IP or fqdn>/INST/idapi/metadata/wsdl
```

If the API SOAP Service uses wsHttpBinding, then Mex metadata exchange can be used, and the metadata exchange URL is same as service endpoint.

Changes to the service are not effective until the service is restarted.

#### 3.1.3 Binding

If the end point is secured with SSL (https), then the binding for IIS is used to map the certificate to the secure endpoint. The service provides the equivalent functionality with the IIS .NET (via idapiservice.svc).

#### 3.1.4 IIS .NET versus WWS

Differences between .NET and WWS include:

- IIS .NET requires more resources and memory.
   The default behavior for IIS applications is to recycle frequently. As a result, initial start up is slow.
- · IIS .NET does support additional options such as IP filtering, ws binding with message security.
- WWS requires less resources and still provides IDAPI access when IIS is stopped.

## 3.2 SOAP API Support with IIS.NET

You can expose the SOAP API via WWS calls with API SOAP Service (idapisoap), or via IdapiService, a Windows Communication Foundation (WCF) service that communicates with the API Service (idapi). IdapiService is an IIS-hosted service that is *not* installed during *Hitachi ID Bravura Security Fabric* installation. To setup IdapiService, you must:

- Configure the API Service with IIS (p9)
- · Add the API Service to IIS (p10)
- Choose an HttpBinding class (p12)
- Modify the Web.config file (p12)

This section also shows you how to set the timeout length (p13).

#### 3.2.1 Configuring the API service (idapi) with IIS

- 1. Install or enable Microsoft .NET Framework 3.5.
- 2. Install .NET Framework 4.0.

The following steps are required for configuring the API Service with IIS 6.0 and 7.0:

- (a) Install ASP.NET and enable it for use with IIS:
  - i. From the command line, go to:
    - C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319
    - Run the following command:
       aspnet\_regiis -i -enable
- 3. Install WCF, which is included with .NET Framework 4.0:
  - (a) Go to

```
C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319 using the command line and run: ServiceModelReg -ia
```

**Note:** Remote calls always use the first installed API Service (idapi) instance.

### 3.2.2 Adding the API Service to IIS

The procedure differs depending on what version of IIS you have:

- IIS 6.0 (p10)
- IIS 7.0/7.5 (p11)

#### 3.2.2.1 IIS 6.0

To add the API Service to IIS 6.0:

- 1. In the IIS manager, click Web Sites.
- 2. Click **Default Web Site**, or a different website if you prefer.
- 3. Select **New|Virtual Directory** to start the Virtual Directory Creation Wizard:
  - (a) On the Virtual Directory Alias screen, type idapiservice in the Alias text box, then click Next.

**Note:** The name for the virtual directory is restricted to idapiservice only.

- (b) On the Web Site Content Directory screen:
  - i. Click Browse.
  - ii. Go to the directory of your Hitachi ID Bravura Security Fabric instance
  - iii. Select the idapiservice directory.
- (c) On the *Virtual Directory Access Permissions* screen, ensure that both "Read" and "Run scripts (such as ASP)" are selected.
- 4. Once the new Virtual Directory is created, then right click and select **Properties** and do the following:
  - (a) Click the **ASP.NET** tab
  - (b) Select the 4.0.30319 for ASP.NET version
  - (c) Click on **OK**
- 5. In Windows Explorer:
  - (a) In the *Bravura Security Fabric <instance>* directory, right-click the idapiservice folder and select **Properties**.
  - (b) Click the **Security** tab.
  - (c) Verify that the "Internet Guest Account" has Read & Execute, List Folder Contents, and Read permissions for the folder.
    - If the "Internet Guest Account" does *not* have all these permissions, then click **Add** to add that user.
- 6. Repeat step item 5c for the idapiservice bin folder.

#### 3.2.2.2 IIS 7.0/7.5

To add the IIS virtual directory for IIS 7.0/7.5:

- 1. Create an application pool with the psadmin account:
  - (a) In IIS Manager go to <**host>** → **Application Pools**.
  - (b) Right-click and select Add Application Pool.
  - (c) Type the name of the Application Pool.
  - (d) Select .NET Framework v4.0.30319.
  - (e) Click OK.
- 2. Set the psadmin account as the Identity of the Application Pool:
  - (a) Right-click the new Application Pool.
  - (b) Select Advanced Settings.
  - (c) Under **Process Model**, locate and highlight the **Identify** field, then click the ellipses button (...) to the right of the field.
  - (d) Select the Custom account option.
  - (e) Click Set....
  - (f) On the **Set Credentials** dialog, enter the username and password for the local psadmin account .\psadmin and click **OK**.
  - (g) Click OK to close the Advanced settings dialog.
- 3. Under the site, create an application folder with a physical path to the idapiservice folder, under the instance.
  - (a) In IIS Manager, go to <*host* $> \rightarrow$  Sites  $\rightarrow$  Default Web Site.
  - (b) Right-click and select **Add Application**.
  - (c) Type idapiservice in the Alias field.
  - (d) Set the application pool:
    - i. Click Select.
    - ii. Choose the newly-created Application Pool.
    - iii. Click OK.
  - (e) In the Physical path, enter the path to the idapiservice folder; for example:
    - C:\Program Files\Hitachi ID\IDM Suite\default\idapiservice
  - (f) Set the psadmin account to access the physical path:
    - i. Click Connect as....
    - ii. Select Specific user.
    - iii. Click Set.
    - iv. Type the local psadmin account . \psadmin and password, then click  $\mathbf{OK}$ .

#### 3.2.3 Choosing an HttpBinding class

You can modify the Web.config file to configure the IdapiService to use either:

· BasicHttpBinding

Or,

WSHttpBinding

Since IdapiService is more easily accessible than the API Service, you could use features in your web server to restrict access to IdapiService by IP address. You could also provide your HTTPS client with an SSL client-side certificate, and configure your web server to accept only that certificate when using IdapiService.

#### **BasicHttpBinding**

By default, BasicHttpBinding is configured in the Web.config file for IdapiService.

You must configure the IdapiService to use BasicHttpBinding if:

- · You cannot use .NET Framework
- You are running an older version of Windows (such as Windows 2000)
- You are using a client built from toolkits that conform to WS-BasicProfile 1.1

When using BasicHttpBinding, it is strongly recommended that you obtain an SSL certificate for the *Hitachi ID Bravura Security Fabric* server and use the HTTPS protocol for all requests to the IdapiService.

#### **WSHttpBinding**

The Web.config file for IdapiService can be configured to use WSHttpBinding. This binding provides secure and reliable communication between IdapiService and clients that can use Microsoft .NET Framework. However, WSHttpBinding uses pass-through authentication using SSPI (Security Support Provider Interface). This means that an account *must* exist on the *Bravura Security Fabric* server which has the same username and password as the user running the program using the API (SOAP client).

Unless you are certain that you want to use WSHttpBinding, it is recommended that you use BasicHttp-Binding.

#### 3.2.4 Modifying the Web.config file

To modify the Web.config file:

- 1. Go to the *Hitachi ID Bravura Security Fabric* instance directory and into the idapiservice folder. Open the Web.config file using a text editor.
- 2. (Optional) Under <appSettings>, locate this line:

```
<add key="instanceName" value="" />
```

and set the attribute value with the name of your Bravura Security Fabric instance.

- 3. To configure HTTPS (HTTP over SSL), rename the Web-SSL.config file to Web.config, then configure the instanceName line as above.
- 4. (Optional) Within the following lines:

```
<endpoint address=""
binding="basicHttpBinding"
contract="idapi.Iidapi"/>
```

The binding attribute determines the binding used by IdapiService. If you want to use WSHttpBinding (see Choosing an HttpBinding class), change the binding to wsHttpBinding:

```
<endpoint address=""
binding="wsHttpBinding"
contract="idapi.lidapi"/>
```

If the above procedures have been completed correctly, then IdapiService should now be accessible. Open a web browser and go to: http://<domainname>/idapiservice/idapiservice.svc, where <domainname> is the domain of your IIS web service. You should now see a page titled "IdapiService Service" and the words "You have created a service."

**Note:** This will not work if the Application Pool is using .NET Framework v2.0

#### 3.2.5 Setting the timeout length (Optional)

Optionally, set the timeout length between the IdapiService and the API service by modifying the following registry key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Hitachi ID\oduct>\<instance>\Idapi\SoapTimeout
```

The value is expressed in milliseconds. If the current timeout is too short to service API requests, then the value can be changed to a larger number.

By default, the timeout length is set to 60000 milliseconds, which is one minute.

## 3.3 Using the SOAP API

The SOAP API can be used by any SOAP client toolkit that conforms to the SOAP standards.

#### 3.3.1 Obtaining a WSDL File

Most SOAP toolkits can generate an interface in your chosen programming language from a *Web Services Description Language (WSDL) file*. A WSDL file describes the functions provided by an API, their expected input parameters, and their output parameters.

The WSDL file is generated dynamically by IdapiService. Your SOAP client toolkit should have a utility to obtain the WSDL file from the service, based on the endpoint for IdapiService: Either with the IIS.NET:

http://<domainname>/<instance>/idapiservice/idapiservice.svc?wsdl

or WWS Service (with HTTP GET):

http://<domainname>/<instance>/idapi/wsdl

or WWS Server (with Mex):

https://<domainname>/<instance>/idapi/metadata/wsdl

Consult the documentation included with your SOAP toolkit for instructions on obtaining WSDL files.

#### 3.3.2 Writing a Client Program Without a WSDL File

Some languages, such as C++.Net, rely on the WSDL file and use it to allow for type-safe development of a client program.

Other languages, such as Visual Basic, can act as a SOAP client without using the WSDL file. While such a client can be used successfully against the SOAP server, it may be more difficult to write since the client language does not provide any tools for ensuring that the correct SOAP structure is used to generate a request.

The idapi.h and idapi.dll libraries can provide access to the API SOAP Service (idapisoap) without use of a WSDL file. All functions and signatures are included in idapi.h. See C or Python for further details.

#### 3.3.3 Setting up a product administrator for authorization

To connect to the API Service (idapi), a user ID and password of an *Hitachi ID Bravura Security Fabric* product administrator may be used instead of a profile ID. See the *Bravura Security Fabric* manual for details on setting up a product administrator. This user ID and password is supplied to the Login function.

#### 3.3.4 Sequence of API Calls

There are two ways to make API calls:

1. Login | LoginEx and Logout function calls are required to begin and end a session. Therefore, a typical session with IdapiService would proceed as follows:

**Note:** Function details have been removed from this example for the sake of clarity.

```
Login(conn, ...);
apiFunction1(conn, ...);
apiFunction2(conn, ...);
...
apiFunctionN(conn, ...);
Logout(conn, ...);
```

2. Call API with a single method. This method will accept credentials of IDAPI caller, perform some functions and terminate the session. So, Login | LoginEx and Logout function calls are not required any more. A single API call would process as follows:

**Note:** Function details have been removed from this example for the sake of clarity.

```
apiFunction1(creds, ...);
apiFunction2(creds, ...);
```

Workflow requests made through the API follow the same pattern as workflow requests made through the GUI: a request is created, request attributes are set if required, request actions are added if required, the request is submitted, and the request is approved. Each request is assigned a request ID (batchsig) when it is created which must be used in subsequent API calls relating to it.

A workflow automation request intended to be handled entirely within the API might proceed as follows:

**Note:** Function details have been removed from this example for the sake of clarity.

```
Login(conn, ...);
WFRequestCreate(conn, batchsig, ...);
WFRequestAttrsSet(conn, batchsig, ...);
WFRequestActionsSet(conn, batchsig, ...);
WFRequestAttrActionsPopulate(conn, batchsig, ...);
WFRequestSubmit(conn, batchsig, ...);
WFApprove(conn, batchsig, ...);
Logout(conn);
```

Workflow requests can also be handled by single API call:

**Note:** Function details have been removed from this example for the sake of clarity.

```
WFRequestCreate(creds, batchsig, ...);
WFRequestAttrsSet(creds, batchsig, ...);
WFRequestActionsSet(creds, batchsig, ...);
WFRequestAttrActionsPopulate(creds, batchsig, ...);
WFRequestSubmit(creds, batchsig, ...);
WFApprove(creds, batchsig, ...);
```

#### 3.3.5 Calling conventions

The calling conventions depend on which programming language and SOAP toolkit that you use.

All API functions have an output parameter called rc.

A non-streaming function is called only once. If the rc value is 0, it is successful. Otherwise the error is returned as outlined in List of Return Values.

A streaming function (p34) is called until API\_NO\_MORE\_DATA (1) is returned. While the rc value is 0, there is more data to return. If no information is available, API\_NO\_MORE\_DATA is returned on the first call to the API function.

The handle input and output field is used to continue a streamed idapi function call. On the initial call, the handle is empty. The handle provided on the response needs to be used in subsequent calls to retrieve information.

To call the same function again a call with an empty handle will abandon the current streamed call and make a new streamed call.

The SOAP toolkit provides a method of indicating errors when connecting to IdapiService or when parsing the CGI's response.

#### 3.3.6 Argument Types

There are three parts to the definition of an argument in API Service:

- · Data type
- · Cardinality (size)
- Direction

#### 3.3.6.1 Argument Data Types

Two fundamental argument data types are used: int and string. Complex types are also used, which may contain ints, strings, or other complex types.

Complex types are unique to the API functions that support them, and are documented in SOAP API Reference with their associated functions.

#### 3.3.6.2 Argument Cardinality (Size)

Any argument can be a scalar or a vector. A scalar is one item of that type, and a vector is an array of that type. Vector arguments are represented in SOAP with an ArrayOf Type naming convention.

The representation of a vector differs depending both on the language and the SOAP toolkit. For languages that included array length as a property of the array, such as Java, the representation should be straightforward.

For C, C++, and any other languages that do not provide a well-defined array length, the SOAP toolkit may generate code with extra parameters to hold the length of their associated arrays.

#### 3.3.6.3 Argument Direction

An argument can be in, out, or inout.

#### 3.3.6.4 Summary of Types

This section is a summary of the argument types and how they appear in function declarations:

Type and Size	SOAP Type Name
int (scalar)	integer
string (scalar)	string
Complex type (scalar)	typename

#### 3.4 SOAP Client Toolkits

This section describes how to set up certain types of SOAP clients and work around problems that have been observed in certain SOAP toolkits.

The following SOAP client toolkits are included in this section:

- Microsoft Visual C# (p18)
- Microsoft Visual C++ .NET 2005 SP1 (p19)
- Java (p20)

#### 3.4.1 Microsoft Visual C#

#### 3.4.1.1 Generating the Client Through the IDE

To have Visual Studio auto-generate the client proxy class from the IdapiService endpoint:

- Go to the Solution Explorer window in the Visual Studio IDE.
- · Right-click your project.
- Select Add Service Reference....

The Add Service Reference window opens.

Type the Address:

```
http://<domainname>/<instance>/idapiservice/idapiservice.svc
```

Where <domainname> is the domain used by the IIS running IdapiService. For details, see Adding the API Service (idapi) to IIS.

· Click Go.

After several seconds, IdapiService appears in the Services listbox.

Click OK. An app.config file and the service reference to IdapiService is added to your project.

#### 3.4.1.2 Generating the Client with Sycutil

The ServiceModel Metadata Utility tool (svcutil.exe), included with the Microsoft Windows SDK, can generate a client proxy class from the IdapiService endpoint.

Run it with the following parameters (on one line):

```
svcutil
  /config:app.config
  http://<domainname>/<instance>/idapiservice/idapiservice.svc?wsdl
```

Where < domainname > is the domain used by the IIS running IdapiService For details, see Adding the API Service to IIS.

Svcutil produces two files, app.config and IdapiService.cs, which you can add directly to your C# project.

#### 3.4.2 Microsoft Visual C++ .NET 2005 SP1

The ServiceModel Metadata Utility tool (svcutil.exe), included with the Microsoft Windows SDK, can generate a client proxy class from the IdapiService endpoint. Run it with the following parameters (on one line):

```
svcutil
  /config:<appname.exe>.config
  http://<domainname>/<instance>/idapiservice/idapiservice.svc?wsdl
```

Where <appname.exe> is the name of your C++ application, including .exe extension, and <domainname> is the domain used by the IIS running IdapiService. For details, see Adding the API Service to IIS.

Svcutil produces two files, <appname.exe>.config and IdapiService.h. However, before it can be used in your Visual C++ .NET application, the IdapiService.h file needs to be updated with the following modifications:

· Locate each instance of the following method:

```
System::Runtime::Serialization::ExtensionDataObject^ get();
and make it virtual:
virtual System::Runtime::Serialization::ExtensionDataObject^ get();
```

· Locate each instance of the following method:

```
System::Void set(System::Runtime::Serialization::ExtensionDataObject^ value);
and make it virtual:
virtual System::Void set(System::Runtime::Serialization::ExtensionDataObject^ → value);
```

· Replace every instance of

```
this.
with
this->
```

• In the lidapiClient class, locate every method that overrides a method in the lidapi base class, e.g.:

1. Remove the qualifier to the lidapi base class:

```
WFRequestGetReply WFRequestGet(WFRequestGetRequest request);
```

2. Make it virtual:

```
virtual WFRequestGetReply^ WFRequestGet(WFRequestGetRequest^ request);
```

· Replace every instance of

```
System::ServiceModel::ClientBase'1
with
System::ServiceModel::ClientBase<Iidapi^ >
```

#### 3.4.3 Java

#### 3.4.3.1 Generating the Client with wsimport

The Java SE (JDK) includes the wsimport utility to generate a client proxy class for the IdapiService endpoint.

Run it with the following parameters (on one line):

```
wsimport -keep -verbose http://<domainname>/<instance>/idapi/wsdl
```

where < domainname > is the domain used by the IIS running IdapiService.

The utility produces the class files, which you can use in a Java program.

## 3.5 Sample uses of the SOAP API

This section contains sample client code written using various SOAP client toolkits:

- Microsoft Visual C# (p21)
- Microsoft Visual C++ .NET 2005 (p30)

This section also provides information about sample files, shipped with *Hitachi ID Bravura Security Fabric*, that can be used to communicate with the API SOAP Service (idapisoap), without the use of a WSDL file:

- Java (p32)
- C (p32)
- Python (p32)

#### 3.5.1 Microsoft Visual C#

The following is a sample C# program that uses the client proxy class generated by svcutil.exe.

```
using System;
using System.Collections.Generic;
using System.Text;
using www.hitachiid.com.idapi;
namespace idapitestcsharp
  {
  class Test
    static void Usage()
      Console.WriteLine( "usage: idapitestwcf -userid <userid> -pwd <pwd> [options]" );
      Console.WriteLine( "where <userid> is an ID-Synch user ID" );
                             <password> is <userid>'s password" );
      Console.WriteLine( "
                            [options] is one or more of the following:");
      Console.WriteLine( "
      Console.WriteLine( "
                                  -isadmin indicates <userid> should log in as an ID-Synch
  \rightarrowconsole user");
     Console.WriteLine( "
                                  -reqreject indicates that the request should be rejected\n"
                                  -reqcancelbyreqer indicates that the request should be
      Console.WriteLine( "
  \rightarrowcancelled by");
     Console.WriteLine( "
                                  the requester" );
     Console.WriteLine( "
                                 -requancelbyrecip indicates that the request should be
  \rightarrowcancelled by");
     Console.WriteLine( "
                                   the recipient");
      Console.WriteLine( "
                                  -rescancel indicates that the resource creation should
  \rightarrowbe cancelled");
      }
```

```
static void Main( string[] args )
   {
    try
     {
      int numArgs = args.Length;
     if ( numArgs < 2 )
       Usage();
       return;
      String aidStr = "", apwStr = "";
      bool isadmin = false;
      for ( int i = 0; i < numArgs; i++ )
        if( args[i] == "-userid" && i + 1 < numArgs )</pre>
         {
         i++;
         aidStr = args[i];
         }
        else if( args[i] == "-pwd" && i + 1 < numArgs )
         {
         i++;
         apwStr = args[i];
        else if( args[i] == "-isadmin" )
         {
          isadmin = true;
         }
        else
         Console.WriteLine( "unrecognized argument {0}", args[i] );
         Usage();
         return;
        }
      if( aidStr == "" || apwStr == "" )
        Console.WriteLine( "Missing <userid> and/or <pwd>" );
        return;
        }
      IidapiClient client = new IidapiClient();
      String sessdat = "";
      String batchid = "";
      bool loggedIn = false;
      Console.WriteLine( "Testing Login" );
      idapi.LoginRequest req = new idapi.LoginRequest();
      req.isadmin = isadmin ? 1 : 0;
      req.options = "";
      req.userid = aidStr;
      req.password = apwStr;
      idapi.LoginReply reply = client.Login(req);
      Console.WriteLine( " rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", reply.rc, reply.errmsg,
\rightarrowreply.sessdat );
```

```
loggedIn = reply.rc == 0;
      if( !loggedIn )
        Console.WriteLine( "Login failed" );
      else
        Console.WriteLine( "Login succeeded" );
        sessdat = reply.sessdat;
      if ( loggedIn )
        Console.WriteLine( "Testing UserEnable" );
        idapi.UserEnableRequest enablereq=new idapi.UserEnableRequest();
        enablereq.input = new UserEnable_vectorInput[0];
        idapi.UserEnableReply enablereply;
        enablereq.userid = "jseinfeld";
        enablereq.allAccounts = 0;
        enablereq.sessdat = sessdat;
        enablereply = client.UserEnable(enablereq);
        Console.WriteLine( " rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", enablereply.rc,
→enablereply.errmsg, enablereply.sessdat );
        if (enablereply.rc != 0 && enablereply.rc != 1)
          {
          Console.WriteLine( "UserEnable failed" );
          }
        else
          {
          Console.WriteLine( "UserEnable succeeded" );
        sessdat = enablereply.sessdat;
      if (loggedIn)
          idapi.UserGetByIDRequest ugreq = new idapi.UserGetByIDRequest();
          ugreq.sessdat = sessdat;
          ugreq.userid = "jseinfeld";
          Console.WriteLine("Testing UserGetByID");
          idapi.UserGetByIDReply ugreply;
          ugreply = client.UserGetByID(ugreq);
          Console.WriteLine(" rc = {0}, err = [{1}], sessdat [{2}]", ugreply.rc, ugreply.errmsg,
\rightarrowugreply.sessdat);
        sessdat = ugreply.sessdat;
          if(ugreply.rc == 0)
              for (int i = 0; i < ugreply.output.Length; i++)</pre>
                  Console.Write(" [{0}]", ugreply.output[i].alias);
                  Console.WriteLine(" [{0}]", ugreply.output[i].isadmin);
              }
          if (ugreply.rc != 0 && ugreply.rc != 1)
```

```
{
              Console.WriteLine("UserGetByID failed");
          else
              Console.WriteLine("UserGetByID succeeded");
      }
      if (loggedIn)
          idapi.UserclassActorGetRequest ucreq = new idapi.UserclassActorGetRequest();
          ucreq.sessdat = sessdat;
          ucreq.userclass = "TESTUC";
         Console.WriteLine("Testing UserclassActorGet");
          idapi.UserclassActorGetReply ucreply;
          ucreply = client.UserclassActorGet(ucreq);
          Console.WriteLine(" rc = {0}, err = [{1}], sessdat [{2}]", ucreply.rc, ucreply.errmsg,
→ucreply.sessdat );
        sessdat = ucreply.sessdat;
          if(ucreply.rc == 0)
              for (int i = 0; i < ucreply.output.Length; i++)</pre>
                  Console.Write(" [{0}]", ucreply.output[i].actor);
          if (ucreply.rc != 0 && ucreply.rc != 1)
              Console.WriteLine("UserclassActorGet failed");
          else
              Console.WriteLine("UserclassActorGet succeeded");
          idapi.UserclassMembershipCheckRequest ucmreq = new idapi.UserclassMembershipCheckRequest
          ucmreq.input = new UserclassMembershipCheck_vectorInput[2];
          ucmreq.input[0].actor = "";
      }
      if (loggedIn)
          Console.WriteLine("Testing WFRequestCreate");
          idapi.WFRequestCreateRequest wfrcReq = new idapi.WFRequestCreateRequest();
          wfrcReq.recipid = "jseinfeld";
          wfrcReq.recipemail = "jseinfeld@psynch.com";
          wfrcReq.recippass = "5*Hotel";
          wfrcReq.requesteremail = "bobo@psynch.com";
          wfrcReq.requestreason = "he needs the money.";
          wfrcReq.sessdat = sessdat;
          idapi.WFRequestCreateReply wfrcRep;
          //WFRequestCreate_vectorOutput[] WFRequestCreateOutput;
          wfrcRep = client.WFRequestCreate(wfrcReq);
```

```
Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrcRep.rc, wfrcRep.errmsg,
\rightarrowwfrcRep.sessdat);
        sessdat = wfrcRep.sessdat;
          wfrcReq.sessdat = sessdat;
          if (wfrcRep.rc == 0)
              for (int i = 0; i < wfrcRep.output.Length; i++)</pre>
                  Console.WriteLine("Batch id [{0}]", wfrcRep.output[i].batchsig );
                  batchid = wfrcRep.output[i].batchsig;
          if (wfrcRep.rc != 0 && wfrcRep.rc != 1)
              Console.WriteLine("WFRequestCreate failed");
          }
          else
              Console.WriteLine("WFRequestCreate succeeded");
      }
      if (loggedIn && batchid.Length > 0)
          Console.WriteLine("Testing WFRequestSet");
          idapi.WFRequestSetRequest wfrsReq = new idapi.WFRequestSetRequest();
          wfrsReq.batchsig = batchid;
          wfrsReq.recipemail = "jseinfeld@psynch.com";
          wfrsReq.recipid = "jseinfeld";
          wfrsReq.recippass = "letmein1!";
          wfrsReq.requesteremail = "bobo@psynch.com";
          wfrsReq.requestreason = "He needs the money.";
          wfrsReq.sessdat = sessdat;
          idapi.WFRequestSetReply wfrsReply;
          wfrsReply = client.WFRequestSet(wfrsReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrsReply.rc, wfrsReply.errm
→wfrsReply.sessdat );
          if (wfrsReply.rc != 0)
              Console.WriteLine("WFRequestSet failed");
          else
              Console.WriteLine("WFRequestSet succeeded");
        sessdat = wfrsReply.sessdat;
      if (loggedIn && batchid.Length > 0)
          Console.WriteLine("Testing WFRequestGet");
          idapi.WFRequestGetRequest wfrgReq = new idapi.WFRequestGetRequest();
          wfrgReq.batchsig = batchid;
          wfrgReq.sessdat = sessdat;
```

```
idapi.WFRequestGetReply wfrqReply;
          wfrgReply = client.WFRequestGet(wfrgReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrgReply.rc, wfrgReply.errm
→wfrgReply.sessdat );
        sessdat = wfrqReply.sessdat;
          wfrqReq.sessdat = sessdat;
          if(wfrqReply.rc == 0)
              for (int i = 0; i < wfrgReply.output.Length; i++)</pre>
                  Console.Write(" [{0}]", wfrgReply.output[i].recipid );
                  Console.Write(" [{0}]", wfrgReply.output[i].status);
                  Console.Write(" [{0}]", wfrgReply.output[i].recippass );
                  Console.Write(" [{0}]", wfrgReply.output[i].recipemail);
                  Console.Write(" [{0}]", wfrgReply.output[i].requesterid);
                  Console.Write(" [{0}]", wfrgReply.output[i].requesteremail);
                  Console.Write(" [{0}]", wfrgReply.output[i].notes);
                  Console.Write(" [{0}]", wfrgReply.output[i].prevstatus);
                  Console.Write(" [{0}]", wfrgReply.output[i].regadmin);
                  Console.Write(" [{0}]", wfrgReply.output[i].sessionid);
                  Console.Write(" [{0}]", wfrgReply.output[i].entrydate);
                  Console.Write(" [{0}]", wfrgReply.output[i].lastauth);
                  Console.Write(" [{0}]", wfrgReply.output[i].reason);
                  Console.Write(" [{0}]", wfrgReply.output[i].canceledby);
                  Console.Write(" [{0}]", wfrgReply.output[i].termdate);
                  Console.Write(" [{0}]", wfrgReply.output[i].startdate);
                  Console.Write(" [{0}]", wfrgReply.output[i].segsig );
                  Console.Write(" [\{0\}]", wfrgReply.output[i].superbatchsig );
                  Console.Write(" [{0}]", wfrgReply.output[i].reserveid);
                  Console.WriteLine(" [{0}]", wfrgReply.output[i].@delegate);
              }
          if (wfrgReply.rc != 0 && wfrgReply.rc != 1)
              Console.WriteLine("WFRequestGet failed");
          else
              Console.WriteLine("WFRequestGet succeeded");
      }
      if (loggedIn && batchid.Length > 0)
          Console.WriteLine("Testing WFRequestAttrsSet");
          idapi.WFRequestAttrsSetRequest wfrasReq = new idapi.WFRequestAttrsSetRequest();
          idapi.WFRequestAttrsSetReply wfrasReply;
          wfrasReq.batchsig = batchid;
          wfrasReq.sessdat = sessdat;
          wfrasReq.input = new WFRequestAttrsSet_vectorInput[2];
          wfrasReq.input[0].name = "FIRST_NAME";
          wfrasReq.input[0].value = "Jerry";
          wfrasReq.input[1].name = "LAST_NAME";
          wfrasReq.input[1].value = "Seinfeld";
```

```
wfrasReply = client.WFRequestAttrsSet(wfrasReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrasReply.rc,
→wfrasReply.errmsq, wfrasReply.sessdat );
          if (wfrasReply.rc != 0)
              Console.WriteLine("WFRequestAttrsSet failed");
          else
              Console.WriteLine("WFRequestAttrsSet succeeded");
        sessdat = wfrasReply.sessdat;
      }
      if (loggedIn && batchid.Length > 0)
          idapi.WFRequestAttrsGetRequest wfraqReq = new idapi.WFRequestAttrsGetRequest();
          idapi.WFRequestAttrsGetReply wfragReply;
          Console.WriteLine("Testing WFRequestAttrsGet");
          wfragReq.batchsig = batchid;
          wfragReq.sessdat = sessdat;
          wfragReply = client.WFRequestAttrsGet(wfragReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfraqReply.rc,
→wfragReply.errmsg, wfragReply.sessdat );
        sessdat = wfragReply.sessdat;
          wfragReq.sessdat = sessdat;
          while(wfragReply.rc == 0)
              for (int i = 0; i < wfragReply.output.Length ; i++)</pre>
                  Console.Write(" [{0}]", wfragReply.output[i].name);
                  Console.WriteLine(" [{0}]", wfragReply.output[i].value);
              wfragReq.sessdat = wfragReply.sessdat;
              wfragReply = client.WFRequestAttrsGet(wfragReq);
          if (wfragReply.rc != 0 && wfragReply.rc != 1)
              Console.WriteLine("WFRequestAttrsGet failed");
          }
          else
              Console.WriteLine("WFRequestAttrsGet succeeded");
      }
      if (loggedIn)
          Console.WriteLine("Testing WFRequestOperationTypes");
          idapi.WFRequestOperationTypesRequest wfrotReq = new idapi.WFRequestOperationTypesRequest
          wfrotReq.sessdat = sessdat;
          idapi.WFRequestOperationTypesReply wfrotReply;
          wfrotReply = client.WFRequestOperationTypes(wfrotReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrotReply.rc,
```

```
→wfrotReply.errmsg, wfrotReply.sessdat );
        sessdat = wfrotReply.sessdat;
          wfrotReq.sessdat = sessdat;
          if (wfrotReply.rc == 0)
              for (int i = 0; i < wfrotReply.output.Length; i++)</pre>
                  Console.Write(" [{0}]", wfrotReply.output[i].name);
                  Console.WriteLine(" [{0}]",
                                     wfrotReply.output[i].description);
              }
          if (wfrotReply.rc != 0 && wfrotReply.rc != 1)
              Console.WriteLine("WFRequestOperationTypes failed");
          }
          else
          {
              Console.WriteLine("WFRequestOperationTypes succeeded");
      }
      if (loggedIn && batchid.Length > 0)
          Console.WriteLine("Testing WFRequestActionsSet");
          idapi.WFRequestActionsSetRequest wfrasReq = new idapi.WFRequestActionsSetRequest();
          wfrasReq.input = new WFRequestActionsSet_vectorInput[1];
          wfrasReq.input[0].operationType = "ACUA";
          wfrasReq.input[0].tplid = "TEMPLATE1";
          wfrasReq.input[0].reason = "He's the king of the world!";
          idapi.WFRequestActionsSetReply wfrasReply;
          wfrasReq.sessdat = sessdat;
          wfrasReq.batchsig = batchid;
          wfrasReply = client.WFRequestActionsSet(wfrasReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrasReply.rc,
→wfrasReply.errmsg, wfrasReply.sessdat );
          if (wfrasReply.rc != 0)
              Console.WriteLine("WFRequestActionsSet failed");
          }
          else
              Console.WriteLine("WFRequestActionsSet succeeded");
        sessdat = wfrasReply.sessdat;
      }
      String[] actionsList = new String[0];
      if (loggedIn && batchid.Length > 0)
      {
          Console.WriteLine("Testing WFRequestActionsGet");
          idapi.WFRequestActionsGetRequest wfrasgReq = new idapi.WFRequestActionsGetRequest();
          wfrasgReq.batchsig = batchid;
```

```
wfrasgReq.sessdat = sessdat;
          idapi.WFRequestActionsGetReply wfrasgReply;
          wfrasgReply = client.WFRequestActionsGet(wfrasgReq);
          Console.WriteLine(" rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", wfrasgReply.rc,
→wfrasqReply.errmsq, wfrasqReply.sessdat );
        sessdat = wfrasqReply.sessdat;
          wfrasqReq.sessdat = sessdat;
          while(wfrasgReply.rc == 0)
              for (int i = 0; i < wfrasgReply.output.Length; i++)</pre>
                  Console.Write(" [{0}]",
                                 wfrasqReply.output[i].operationType );
                  Console.Write(" [{0}]", wfrasgReply.output[i].reqacctsig);
                  Console.Write(" [{0}]", wfrasgReply.output[i].acctid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].dstuserid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].groupid);
                  Console.Write(" [{0}]", wfrasqReply.output[i].targetid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].newctx);
                  Console.Write(" [{0}]",
                                 wfrasgReply.output[i].parentrole);
                  Console.Write(" [{0}]", wfrasgReply.output[i].reason);
                  Console.Write(" [{0}]", wfrasgReply.output[i].resmemberid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].roleid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].sodid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].srcuserid);
                  Console.Write(" [{0}]", wfrasgReply.output[i].tplid);
                  Console.WriteLine(" [{0}]",
                                      wfrasgReply.output[i].userid);
                  Array.Resize<String>(ref actionsList, actionsList.Length + 1);
                  actionsList[actionsList.Length - 1] = wfrasgReply.output[i].reqacctsig;
              wfrasgReq.sessdat = wfrasgReply.sessdat;
              wfrasgReply = client.WFRequestActionsGet(wfrasgReq);
          if (wfrasgReply.rc != 0 && wfrasgReply.rc != 1)
              Console.WriteLine("WFRequestActionsGet failed");
          }
          else
          {
              Console.WriteLine("WFRequestActionsGet succeeded");
      }
      if (loggedIn)
        Console.WriteLine( "Testing Logout" );
          idapi.LogoutRequest outreq=new idapi.LogoutRequest();
          outreq.sessdat = sessdat;
          idapi.LogoutReply rep;
        rep = client.Logout( outreq );
        Console.WriteLine( " rc = \{0\}, err = [\{1\}], sessdat [\{2\}]", rep.rc, rep.errmsg,
\rightarrowrep.sessdat);
        loggedIn = !(rep.rc == 0);
```

#### 3.5.2 Microsoft Visual C++ .NET 2005

The following is a sample Visual C++ .NET 2005 program that uses the client proxy class generated by svcutil.exe.

```
#define WIN32_LEAN_AND_MEAN
// Disable client timeout for testing. Default is 10000 milliseconds.
#define ATL_SOCK_TIMEOUT INFINITE
// Minimum system requirements are Windows 98, Windows NT 4.0, or later
#define _WIN32_WINDOWS 0x0410
#include <atlbase.h>
#include "IdapiService.h" // client wrapper class generated from IdapiService
                          // by svcutil.exe
#include <conio.h>
using namespace www::hitachiid::com::idapi; // namespace of client wrapper class
int _tmain(int argc, _TCHAR* argv[])
 {
 try
    //*** Step 1: instantiate the WCF client
   IidapiClient^ client = gcnew IidapiClient();
   //*** Step 2: log in
   bool rcBool = true;
   bool% tRcBool = rcBool;
   LoginRequest^ loginRequest = gcnew LoginRequest();
   loginRequest->userid = "consoleuser1";
   loginRequest->password ="password123";
    loginRequest->isadmin = 1;
   LoginReply^ loginReply = client->Login( loginRequest );
```

```
if( loginReply->rc != 0 && loginReply->rc != 1 )
   {
   printf( "Login call failed: rc=%d, errmsg=%s\n\n", loginReply->rc,
            loginReply->errmsg );
  else
   printf( "Login suceeded\n\n" );
   }
  //*** Step 3: find a user
 UserGetByIDRequest^ userGetRequest = gcnew UserGetByIDRequest();
 userGetRequest->userid = "foo";
 userGetRequest->sessdat = loginReply->sessdat;
 UserGetByIDReply^ userGetReply = client->UserGetByID( userGetRequest );
 if( userGetReply->rc != 0 && userGetReply->rc != 1 )
   printf( "UserGetByID call failed: rc=%d, errmsq=%s\n\n",
            userGetReply->rc, userGetReply->errmsg );
    }
 else
   {
   printf( "UserGetByID succeeded\n" );
    for( int i = 0; i < userGetReply->output->Length; i++ )
     {
     printf( " [%s], [%d]\n",
              userGetReply->output[i]->alias,
              userGetReply->output[i]->isadmin );
     }
    printf( "\n" );
    }
  //*** Step 4: log out
 LogoutRequest^ logoutRequest = gcnew LogoutRequest();
  logoutRequest->sessdat = userGetReply->sessdat;
  if( logoutReply->rc != 0 && logoutReply->rc != 1 )
   printf( "Logout call failed: rc=%d, errmsg=%s\n\n", logoutReply->rc,
           logoutReply->errmsg );
   }
 else
   printf( "Logout succeeded\n\n" );
   }
  //*** Step 5: clean up
 client->Close();
  }
catch ( Exception ^ e )
 printf( "%s\n", e->ToString() );
return 0;
```

}

#### 3.5.3 Java

Hitachi ID Bravura Security Fabric ships with idapi\_soap\_client\_sample.java which can be modified and used to communicate with the API SOAP Service (idapisoap). The file is included in the samples directory. If you cannot find the sample file, try re-running setup to modify your installation. Sample files are automatically installed only with complete installations. You can select them in custom installations.

The Java sample program can be compiled with the Java SE (JDK). The sample Java program uses the client proxy class generated by wsimport.exe.

## 3.5.4 C

Hitachi ID Bravura Security Fabric ships with api\_sample.py which can be modified and used to communicate with the API SOAP Service. The file is included in the samples\idmlib\script\ directory. If you cannot find the sample file, try re-running setup to modify your installation. Sample files are automatically installed only with complete installations. You can select them in custom installations.

The C program can be compiled with the idapi.h header file, and requires the idapi.dll to run. Both of these are included in the \<instance>\lib\\ directory. If the 64-bit version is required, use \<instance>\\ \\ \\_\lib\\x64\\ idapi.dll.

Versions of the idapi shared library for various Linux/Unix flavors can be found in the tar archive files shipped with *Hitachi ID Connector Pack*.

## **3.5.5** Python

Hitachi ID Bravura Security Fabric ships with testidapi.py, which can be modified and used to communicate with the API SOAP Service. The file is included in the samples\ directory. If you cannot find the sample file, try re-running setup to modify your installation. Sample files are automatically installed only with complete installations. You can select them in custom installations.

The sample file requires Python 2.7.x to run and the idapi\_h.py and idapi.dll files included in the \<instance>\lib\ directory. If the 64-bit version is required, use \<instance>\lib\ x64\idapi.dll.

# 3.6 SOAP Message Styles

There are 2 main styles of SOAP Messaging:

- Remote Procedure Call (RPC)
- Document

Each style has two possible sub-styles:

- Literal
- Encoded

The differences are in the format of the message.

Messaging styles are categorized by how the BODY element of the SOAP message is encoded:

**Remote Procedure Call (RPC)** One application makes a function call to another application. All parameters for a request or response are passed inside a single element; compound types are defined.

Note: API Service uses RPC-encoded style.

**Document-style** Applications form request and response messages with XML documents whose syntax is defined by an XML schema. This schema is generally embedded in the WSDL file.

Messaging sub-styles are categorized by how the parameters are encoded within the BODY element:

Literal Each parameter is stored in its own element. Messages are encoded according to XML schema.

**Encoded** Different complex types are defined for each parameter in the SOAP message. Each function has one response type and one request type. Messages are encoded according to SOAP encoding rules.

## 3.7 SOAP API Reference

This section describes each function exposed by the API Service (idapi) API. The general form of the input and output for each function is provided by the *Form of Request* and *Form of Response* sections, respectively.

Note: These are incomplete SOAP messages and are provided for illustrative purposes only.

Each function name is followed by a list of products in parentheses. This list shows the products that support the given function. The server being used by the API client must have a valid (non-expired) license for at least one of the listed products in order to use the function. If the license is expired, the ERR\_LICENSE\_EXPIRED error code will be returned. If there is no license for the required product, the ERR\_LICENSE\_EXCLUDES\_FUNCTION error code will be returned. The phrase "All Products" indicates that all products support the given API function.

#### **Streaming Functions**

Some of the functions stream their results and therefore may need to be called more than once in order to retrieve all of their results. The return value of these functions will be API\_SUCCESS if there are further results available. If there are no further results available, the return value will be API\_NO\_MORE\_DATA.

```
// Login and other initialization code here
// ...
AccountAttrsGetRequest request = new AccountAttrsGetRequest();
request.sessdat = loginReply.sessdat; // assigning sessdat returned by Login()
request.longid = "smithj";
request.targetid = "AD1";
AccountAttrsGetReply reply = client.AccountAttrsGet( request );
while( reply.rc == 0 ) // 0 = API_SUCCESS
  for( int i = 0; i < reply.output.Length; i++ )</pre>
    {
    String currName = reply.output[i].name;
    String currValue = reply.output[i].value;
    // Use current results
    // ...
    }
  request.sessdat = reply.sessdat;
  request.handle = reply.handle;
  reply = client.AccountAttrsGet( request );
  }
```

#### Single API call

When making API calls with a single method, the session handle is not needed from the Login | LoginEx function or previous API call. Instead, the credentials of IDAPI caller will be used; that is:

```
sessdat = "<IDAPI caller ID>/<IDAPI caller password>"
```

**Note:** Streaming functions should still be handled by normal API calls as the session handle is needed to retrieve subsequent results.

#### Searching for resources with ResourceFind

ResourceFind (p345) is used to find a resource of a given type. For each resource type, there is a set of search criteria that can be used to search for resources. See ResourceFind Search Criteria for a list of the search criteria for the supported resource types.

For example, two of the available search criteria for role resources are *enabledOnly* and *assignable*. To find all roles that are enabled and assignable, call ResourceFind (p345) with ROLE for the scalar input, and the following vector input:

name	value
enabledOnly	Т
assignable	Т

## 3.7.1 AccountAdd (*Bravura Security Fabric*)

Record the existence of an account. This only informs the product of the existence of an account, it does not create the account on the target system.

#### Form of Request

### Form of Response

#### 3.7.1.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The host ID to be used.
longid	in	string	The long ID of the account.
shortid	in	string	The short ID of the account.
Shortia	111	String	The short ib of the account.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
	301	ounig	session handle for the north i sail.

# 3.7.2 AccountAttrDelete (Bravura Security Fabric)

Record the removal of values for target system account attributes. This only informs the product of modifications to values, it does not change the target system account attributes on the target system.

## Form of Request

## Form of Response

#### 3.7.2.1 Parameters

Parameter	Direction	Size	Description
targetid	in	atrina	The host ID to be used.
largellu	III	string	The flost to to be used.
longid	in	string	The long ID of the account.
attrkey	in	string	The name of the target attribute key.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.3 AccountAttrLargeCredSet (*Bravura Privilege*)

Propagates a large credential record from request file attribute to account file attribute.

## Form of Request

### Form of Response

## 3.7.3.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The ID of the managed system.
longid	in	string	The ID of the account.
batchid	in	string	The ID identifying the batch the submitted large credential file attribute is in.
attrkey	in	string	The name of the request attribute.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.4 AccountAttrSet (*Bravura Security Fabric*)

Record values for target system account attributes. This only informs the product of modifications to values, it does not change the target system account attributes on the target system. If any account attributes exist for the attributes passed in, they will be replaced.

## Form of Request

#### Form of Response

## 3.7.4.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The host ID to be used.
longid	in	string	The long ID of the account.
attrkey	in	string	The name of the target attribute key.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of values_vectorInput
value	in	string	The values of the attribute. At least one value must be specified.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.5 AccountAttrsGet (*Bravura Security Fabric*)

Retrieves the attribute values associated with the given account. Only the target attributes loaded into *Hitachi ID Bravura Security Fabric* will be returned.

AccountAttrsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## 3.7.5.1 Parameters

Parameter	Direction	Size	Description
longid	in	string	The long ID of the account.
targetid	in	string	The ID of the target.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountAttrsGet_vectorOutput
name	out	string	The name of the attribute.
value	out	string	The value of the attribute.

# 3.7.6 AccountChallengeResponse (*Bravura Security Fabric*)

Retrieve a response from a target based on a user-specified challenge string.

#### Form of Request

### Form of Response

#### 3.7.6.1 Parameters

Parameter	Direction	Size	Description
longid	in	string	Account ID to provide a challenge for.
targetid	in	string	Target ID to query.
challenge	in	string	The challenge string.
inputs	in	string	Optional target-specific additional inputs. These are specified as a comma-separated string of name=value pairs.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

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Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountChallengeResponse_vectorOutput
response	out	string	The response returned by the target.

# 3.7.7 AccountDelete (Bravura Security Fabric)

Record that an account has ceased to exist. This only informs the product of the removal of an account, it does not remove the account on the target system.

## Form of Request

## Form of Response

#### 3.7.7.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The host ID to be used.
longid	in	string	The long ID of the account.
iongia		oung	The long 12 of the descent.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
onnieg -	001	oung	from the API call.
rc	out	int	The return code from the API call.
70	out	IIIL	The return code norn the Arrivan.
sessdat	out	string	The session handle for the next API call.

# 3.7.8 AccountGetByAcctAttr (Bravura Security Fabric)

Retrieves accounts by the given target attribute value.

AccountGetByAcctAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### 3.7.8.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target on which the account resides.
attrkey	in	string	The name of the target attribute key.
value	in	string	The value of the account attribute.
iscasesensitive	in	int	1 for case sensitive, otherwise case insensitive.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountGetByAcctAttr_vectorOutput
longid	out	string	The long ID of the account.
shortid	out	string	The short ID of the account.

# 3.7.9 AccountGetByGUID (Bravura Security Fabric)

Retrieves the target ID and long ID for an account based on its GUID.

#### Form of Request

#### Form of Response

#### 3.7.9.1 Parameters

Parameter	Direction	Size	Description
guid	in	string	The account's GUID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountGetByGUID_vectorOutput
targetid	out	string	The ID of the target the account exists on.
			narameters continued on next nage

Parameter	Direction	Size	Description	
longid	out	string	The long ID of the account.	

# 3.7.10 AccountGetByName (*Bravura Security Fabric*)

Retrieves details for an account based on its target ID and long ID.

### Form of Request

## Form of Response

#### **3.7.10.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target the account exists on.
longid	in	string	The long ID of the account.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountGetByName_vectorOutput
			parameters continued on next nage

Parameter	Direction	Size	Description	
guid	out	string	The account's GUID.	

## 3.7.11 AccountGroupGet (*Bravura Security Fabric*)

Returns a group given its target ID and either group name or group ID. Group name and group ID cannot both be specified. If the group is not managed, then only the shortid and group ID returned by the function will contain values; the remaining output values will be empty or zero.

## Form of Request

#### Form of Response

```
<AccountGroupGetResponse>
   <errmsg>...</errmsg>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...
</AccountGroupGetResponse>
<AccountGroupGet_vectorOutput>
   <shortid>...</shortid>
   <groupid>...
   <overridedesc>...</overridedesc>
   <url>...</url>
   <outofbandadd>...
   <outofbanddel>...
   <location>...
   <type>...</type>
   <authorjoin>...</authorjoin>
   <authorleave>...</authorleave>
   <subtargetid>...</subtargetid>
   <subgroupid>...</subgroupid>
   <ownerasauth>...</ownerasauth>
   <overrideauth>...</overrideauth>
</AccountGroupGet_vectorOutput>
```

### **3.7.11.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target.
shortid	in	string	The name of the target group.
groupid	in	string	The ID of the target group.
caseinsensitivefl	<i>ag</i> in	int	Case insensitivity flag for shortid. 1 is true, 0 is false
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountGroupGet_vectorOutput
shortid	out	string	The name of the target group.
groupid	out	string	The ID of the target group.
overridedesc	out	string	Overriden description.
url	out	string	Help URL.
outofbandadd	out	string	Detect out-of-band additions to this group and take following actions: if 'N' do nothing, if 'U' generate a request to revert change, if 'A' use idtm to undo change and generate a request to perform the change via workflow. Requires tracking of group changes at the target level to be effective.

Parameter	Direction	Size	Description
outofbanddel	out	string	Detect out-of-band deletions to this group and take following actions: if 'N' do nothing, if 'U' generate a request to revert change, if 'A' use idtm to undo change and generate a request to perform the change via workflow. Requires tracking of group changes at the target level to be effective.
location	out	string	Workflow location ID.
type	out	string	Workflow object type.
authorjoin	out	string	Authorization for joining group. CLOS = no membership changes allowed, MODR = approval required, OPEN = no approval required, SUBS = open to members of another group without approval
authorleave	out	string	Authorization for joining group. CLOS = no membership changes allowed, MODR = approval required, OPEN = no approval required, SUBS = open to members of another group without approval
subtargetid	out	string	The ID of the target of the group whose members can join groupid without approval. Ignored if neither authorjoin nor authorleave are set to SUBS.
subgroupid	out	string	The ID of the group whose members can join groupid without approval. Ignored if neither authorjoin nor authorleave are set to SUBS.
ownerasauth	out	int	Automatically add group owners as authorizers. 0 = do not add automatically, otherwise add automatically. Ignored if target configuration does not allow groups to be moderated by owners automatically.
overrideauth	out	string	Override authorization configuration. O = Use only inherited authorization, $N = Do$ not inherit any authorization, $A = Add$ to inherited authorization. Ignored if target configuration does not allow groups to inherit authorization configuration.

## 3.7.12 AccountGroupManage (Bravura Security Fabric)

Manages a specified group on a target.

#### Form of Request

```
<AccountGroupManageRequest>
   <targetid>...</targetid>
   <groupid>...
   <overridedesc>...</overridedesc>
   <url>...</url>
   <outofbandadd>...
   <outofbanddel>...
   <location>...
   <type>...</type>
   <authorjoin>...</authorjoin>
   <authorleave>...</authorleave>
   <subtargetid>...</subtargetid>
   <subgroupid>...</subgroupid>
   <ownerasauth>...</ownerasauth>
   <overrideauth>...
   <sessdat>...</sessdat>
</AccountGroupManageRequest>
```

#### Form of Response

## 3.7.12.1 Parameters

Parameter	Direction	Size	Description
tovostial	t	akida a	The ID of the townsh
targetid	in	string	The ID of the target.
groupid	in	string	The ID of the managed target group.
overridedesc	in	string	Overriden description.
url	in	string	Help URL.

Parameter	Direction	Size	Description
outofbandadd	in	string	Detect out-of-band additions to this group and take following actions: if 'N' do nothing, if 'U' generate a request to revert change, if 'A' use idtm to undo change and generate a request to perform the change via workflow. Requires tracking of group changes at the target level to be effective.
outofbanddel	in	string	Detect out-of-band deletions to this group and take following actions: if 'N' do nothing, if 'U' generate a request to revert change, if 'A' use idtm to undo change and generate a request to perform the change via workflow. Requires tracking of group changes at the target level to be effective.
location	in	string	Workflow location ID.
type	in	string	Workflow object type.
authorjoin	in	string	Authorization for joining group. CLOS = no membership changes allowed, MODR = approval required, OPEN = no approval required, SUBS = open to members of another group without approval
authorleave	in	string	Authorization for joining group. CLOS = no membership changes allowed, MODR = approval required, OPEN = no approval required, SUBS = open to members of another group without approval
subtargetid	in	string	The ID of the target of the group whose members can join groupid without approval. Ignored if neither authorjoin nor authorleave are set to SUBS.
subgroupid	in	string	The ID of the group whose members can join groupid without approval. Ignored if neither authorjoin nor authorleave are set to SUBS.
ownerasauth	in	int	Automatically add group owners as authorizers. 0 = do not add automatically, otherwise add automatically. Ignored if target configuration does not allow groups to be moderated by owners automatically.

Parameter	Direction	Size	Description
overrideauth	in	string	Override authorization configuration. $O = Use$ only inherited authorization, $N = Do$ not inherit any authorization, $A = Add$ to inherited authorization. Ignored if target configuration does not allow groups to inherit authorization configuration.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.13 AccountGroupMemberList (Bravura Security Fabric)

Lists members from a specified managed group.

AccountGroupMemberList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

```
<AccountGroupMemberListRequest>
    <handle>...</handle>
    <targetid>...</targetid>
    <groupid>...
    <directonly>...</directonly>
    <sessdat>...</sessdat>
</AccountGroupMemberListRequest>
```

# Form of Response

```
<AccountGroupMemberListResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</AccountGroupMemberListResponse>
<AccountGroupMemberList_vectorOutput>
    <targetid>...</targetid>
    <groupid>...
    <accountid>...</accountid>
</AccountGroupMemberList_vectorOutput>
```

# 3.7.13.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target.
id	t	akuin n	The ID of the second and the west arrange
groupid	in	string	The ID of the managed target group.
directonly	in	int	Whether to list members only from the given group, or
			from its child groups, too. 0(zero)=list members in either the given group or its child groups, otherwise list
			members only in given group.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountGroupMemberList_vectorOutput
targetid	out	string	The ID of the target on which the account exists.
groupid	out	string	The ID of the managed target group to which the account belongs.
accountid	out	string	The long ID of the member account. Is empty when listing a child group.

# 3.7.14 AccountGroupMemberTest (*Bravura Security Fabric*)

Given a group and one of a profile ID or account ID, tests whether the profile or account is a member in the group, or given two groups, tests whether the second group is a child of the first group. Profile ID, account ID, and child group cannot all be specified. Returns API\_SUCCESS if true, ERR\_INVALID\_RESOURCE\_MEMBER if false.

# Form of Request

#### Form of Response

# 3.7.14.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target.
groupid	in	string	The ID of the managed target group.
accountid	in	string	The account ID to test for membership.
userid	in	string	The profile ID to test for membership.
ctargetid	in	string	The ID of the target on which the child group exists. If no value is provided, then the value of targetid is assumed.

Parameter	Direction	Size	Description
cgroupid	in	string	The ID of the managed group to test for child group membership.
directonly	in	int	Whether to test for membership only with the given group, or with its child groups, too. 0(zero)=test for membership in either the given group or its child groups, otherwise test for membership only in given group.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.15 AccountGroupUnmanage (*Bravura Security Fabric*)

Unmanages a group.

# Form of Request

# Form of Response

# **3.7.15.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target.
groupid	in	string	The ID of the managed target group.
groupia		String	The 15 of the managed target group.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
onneg	out	oung	from the API call.
rc	out	int	The return code from the API call.
10	out	Ш	The return code from the AFT call.
sessdat	out	string	The session handle for the next API call.
-			

# 3.7.16 Accountls Enabled (*Bravura Security Fabric*)

Query a target to discover whether a specified account is enabled or not.

#### Form of Request

# Form of Response

#### **3.7.16.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	Target ID to query.
longid	in	string	Account longid to query.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountIsEnabled_vectorOutput
			parameters continued on next page

Parameter	Direction	Size	Description
enabled	out	int	Whether the account is enabled: 0 is disabled, anything else is enabled.

# 3.7.17 AccountList (Bravura Security Fabric)

Retrieves account(s) from a target system, along with attribute values. Has four modes:

- · Longid empty and no attributes specified: Lists all longids from the target system without attributes
- Longid empty and attributes specified: Lists all longids from the target system with values for specified attributes
- · Longid specified and no attributes specified: Lists values for all attributes for the given longid
- · Longid specified and attributes specified: Lists values for specified attributes for the given longid

AccountList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

#### Form of Response

# **3.7.17.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target from which accounts will be retrieved.
longid	in	string	Optional. The long ID of the account to list attributes for.
includeinvalid	in	int	Optional. Include invalid accounts if true.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attrkeys_vectorInput
attrkey	in	string	Optional. The name of an attribute to retrieve for the account. If unspecified, only lists accounts (does not return attributes).
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountList_vectorOutput
longid	out	string	The long ID of the account.
invalid	out	int	Whether the account is invalid or not.
			narameters continued on next nade

Parameter	Direction	Size	Description	
attrkey	out	string	The name of the attribute.	
value	out	string	The value of the attribute.	

# 3.7.18 AccountPasswordSet (*Bravura Pass*)

Sets the password on a single account for a single target system. This function does not perform any synchronization across target system groups nor user profiles. The Transaction Manager is used to perform the password reset.

AccountPasswordSet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### 3.7.18.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The target ID of the account to reset.
longid	in	string	The account long ID to reset.

Parameter	Direction	Size	Description
password	in	string	The new password.
expire	in	int	If set to 1, also expire the accounts when setting a new password. If set to 0, only set a new password.
queue	in	int	If set to 0, the request is queued to the Transaction Manager with highest priority. If set to 1, the request is queued to the Transaction Manager with normal priority.
inputs	in	string	Optional target-specific additional inputs. These are specified as a comma-separated string of name=value pairs.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountPasswordSet_vectorOutput
result	out	int	The password reset result for the account/target pair. 0 is success, 1 is failure.
retmsg	out	string	A detailed message about the password reset operation.

# 3.7.19 AccountPasswordSync (Bravura Pass)

Reset a password on an account. Depending on target group configuration, accounts that are associated to the same profile and in the same target group as the specified account may also be synchronized. The API caller needs the "change passwords" ACL to be able to run this function properly. This function does not include password strength check.

AccountPasswordSync streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## 3.7.19.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The target ID of the account to reset.

Parameter	Direction	Size	Description
longid	in	string	The account long ID to reset.
password	in	string	The new password.
expire	in	int	If set to 1, also expire the accounts when setting a new password. If set to 2, only expire the accounts and do not set a new password. Otherwise, only set a new password.
queue	in	int	If set to 1, send the password changes to the Password Manager service and return immediately. If set to 0, perform the password changes and wait for them to complete before returning.
ignoretsynch	in	int	If set to 1, ignore target group settings and only work on input accounts. If set to 0, consider target group tsynch option.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AccountPasswordSync_vectorOutput
numAffected	out	int	The number of generated passwords.
			parameters continued on next page

Parameter	Direction	Size	Description
accountid	out	string	The account ID whose password has been changed.
targetid	out	string	The target system ID where the account's password has been synched.
			· · · · · · · · · · · · · · · · · · ·
result	out	int	The password change result on the account/target
			pair. 0 is success, 1 is failure
retmsg	out	string	A detailed message about the operation.

# 3.7.20 AccountPasswordSyncTrigger (*Bravura Pass*)

Test a supplied password against strength rules and/or synchronize the password across associated targets inside the target's group. The source account in the request is NOT reset by this function. Basically, this function behaves similar to Password Filter(trigger) calling Password Manager(idpm.exe) to request password strength check and transparent synchronization. The API caller needs the "change passwords" ACL to be able to run this function properly.

## Form of Request

## Form of Response

#### 3.7.20.1 Parameters

Parameter	Direction	Size	Description
operation	in	int	Valid options are 1: check password strength, 2: synchronize password, 3: check password strength and synchronize password.
password	in	string	The password to be tested or synchronized.
longid	in	string	The account whose password is being tested or synchronized.
targetid	in	string	The target that the account resides on.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.21 AccountRename (*Bravura Security Fabric*)

Record the renaming of a target system account. This only informs the product of the rename, it does not rename the target system account.

# Form of Request

# Form of Response

# 3.7.21.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The host ID to be used.
oldlongid	in	string	The old long ID of the account.
newlongid	in	string	The new long ID of the account.
newshortid	in	string	The new short ID of the account.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.22 AccountUpdate (*Bravura Security Fabric*)

Update account's attributes by directly sending request to Transaction Monitor Service (idtm). Only applies to *Hitachi ID Bravura Identity* and *Hitachi ID Bravura Privilege*.

# Form of Request

# Form of Response

## 3.7.22.1 Parameters

Parameter	Direction	Size	Description
accountid	in	string	The long ID identifying the account.
hostid	in	string	The host ID of the account to be updated.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of tgtattrs_vectorInput
attrkey	in	string	The key of the value to be updated.
value	in	string	The value to update. Values for multi-value should be specified across a series of key/value pairs.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.23 AuthorizerResourceList (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Lists the resources an authorizer is statically assigned to.

AuthorizerResourceList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

# 3.7.23.1 Parameters

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the authorizer.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of AuthorizerResourceList_vectorOutput
resourceid	out	string	The ID of the resource.
restype	out	string	The type of resource. This must be one of the types returned by ResourceTypesList.

# 3.7.24 CancelReport (*Bravura Security Fabric*)

Cancel a report.

# Form of Request

```
<CancelReportRequest>
          <reportid>...</reportid>
          <sessdat>...</sessdat>
</CancelReportRequest>
```

# Form of Response

# 3.7.24.1 Parameters

Parameter	Direction	Size	Description
reportid	in	string	Unique report ID currently being run.
sessdat	in	string	The session handle from the previous API call.
errmsq	out	string	A message describing the error or success resulting
J		3	from the API call.
	_		
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
		<b>9</b>	

# 3.7.25 CertSavedCertifierInfoGet (Bravura Identity, Bravura Privilege, Access Certifier)

Retrieves a saved certification configuration that include a given user as a reviewer.

CertSavedCertifierInfoGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

```
<CertSavedCertifierInfoGetResponse>
   <errmsq>...</errmsq>
   <handle>...</handle>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...
</CertSavedCertifierInfoGetResponse>
<CertSavedCertifierInfoGet_vectorOutput>
   <savedcertid>...</savedcertid>
   <seggen>...</seggen>
   <certifier>...</certifier>
   <description>...</description>
   <userclass>...</userclass>
   <resmemberid>...</resmemberid>
   <membertype>...
   <memberid>...</memberid>
   <nosqroupguid>...</nosqroupguid>
   <groupid>...
   <hostid>...</hostid>
</CertSavedCertifierInfoGet_vectorOutput>
```

#### 3.7.25.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The user ID of the reviewer whose segments will be returned.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CertSavedCertifierInfoGet_vectorOutput
savedcertid	out	string	Saved certification configuration ID.
seggen	out	string	seggen field - type of certification method.
certifier	out	string	Segment reviewer ID.
description	out	string	Saved certification configuration description.
userclass	out	string	Saved certification userclass ID.
resmemberid	out	string	resmemberid of the resource.
membertype	out	string	Contains the membertype (ROLE/TARGET/MANAGEDGROUP/SOD).
memberid	out	string	Contains the memberid.
nosgroupguid	out	string	guid of nosgroup.

Parameter	Direction	Size	Description
groupid	out	string	Managed group ID.
hostid	out	string	Managed group host ID.

# 3.7.26 CertSavedCertifierUpdate (Bravura Identity, Bravura Privilege, Access Certifier)

Updates the reviewer for a saved certification configuration segment.

#### Form of Request

#### Form of Response

#### 3.7.26.1 Parameters

Parameter	Direction	Size	Description
savedcertid	in	string	Saved certification configuration ID.
seggen	in	string	seggen field - type of certification method.
certifier	in	string	Updated segment reviewer ID.
description	in	string	Saved certification configuration description.
userclass	in	string	Saved certification userclass ID.
resmemberid	in	string	resmemberid of the resource.

Parameter	Direction	Size	Description
membertype	in	string	Contains the membertype (ROLE/TARGET/MANAGEDGROUP/SOD).
memberid	in	string	Contains the memberid.
nosgroupguid	in	string	guid of nosgroup.
groupid	in	string	Managed group ID.
hostid	in	string	Managed group host ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.27 CertStartCertCampaign (Bravura Identity, Bravura Privilege, Access Certifier)

Start a certification campaign. The API login must be established by an admin who has the ACLs to initiate API calls.

# Form of Request

```
<CertStartCertCampaignRequest>
   <certdesc>...</certdesc>
   <initiator>...</initiator>
   <emailcontent>...
   <seqdesc>...</seqdesc>
   <intervaldays>...</intervaldays>
   <groupmembertype>...</groupmembertype>
   <includeprofiles>...</includeprofiles>
   <includeprofileattributes>...</includeprofileattributes>
   <enablecomparison>...
   <attributegroup>...</attributegroup>
   <minimumcomparison>...
   <lowerthreshold>...</lowerthreshold>
   <upperthreshold>...</upperthreshold>
   <instructions>...</instructions>
   <signoffpasswdrequired>...</signoffpasswdrequired>
   <validinterval>...
   <commentrequired>...</commentrequired>
   <certmethod>...</certmethod>
   <singlecertifier>...</singlecertifier>
   <orgmanagercertifier>...</orgmanagercertifier>
   <notinuccertifier>...</notinuccertifier>
   <defaultcertifier>...</defaultcertifier>
   <ucpmatching>...</ucpmatching>
   <sessdat>...</sessdat>
   <input>...</input>
</CertStartCertCampaignRequest>
<CertStartCertCampaign_vectorInput>
   <resmembertype>...</resmembertype>
   <resourcetype>...</resourcetype>
   <rescertifier>...</rescertifier>
   <targetid>...</targetid>
   <groupid>...
   <sodid>...</sodid>
   <roleid>...</roleid>
   <userid>...</userid>
   <userclassid>...</userclassid>
   <attrid>...</attrid>
   <attrtype>...</attrtype>
   <priority>...</priority>
   <remediationtype>...</remediationtype>
   <remediationpdr>...</remediationpdr>
   <ucseqment>...</ucseqment>
```

### Form of Response

#### **3.7.27.1 Parameters**

Parameter	Direction	Size	Description
certdesc	in	string	Certification campaign description.
initiator	in	string	The user ID of the initiator - must have ACL for certification.
emailcontent	in	string	Email content to be sent.
segdesc	in	string	Segmentation description.
intervaldays	in	int	Number of days to wait between sending out invitation.
groupmembertyp	<i>e</i> in	string	Group membership types to review. Default is 'M' if not specified. 'A' = accounts only, 'S' = subgroups only, 'M' = accounts and subgroups
includeprofiles	in	int	Include profiles flag. 1 is true, 0 is false
includeprofileattr	ibuntes	int	Include profile attributes flag. 1 is true, 0 is false
			parameters continued on next page

Parameter	Direction	Size	Description
enablecomparisor	in in	int	Enable comparison by attributes. 1 is true, 0 is false
attributegroup	in	string	Attribute group that collects users into peer groups.
minimumcomparis	SÓM	int	The minimum number of peers that a user must have to be compared.
lowerthreshold	in	int	Lower threshold when comparing percentage of peers with same entitlement
upperthreshold	in	int	Upper threshold when comparing percentage of peers with same entitlement
instructions	in	string	Initiator instructions to certifier.
signoffpasswdrequ	uired	int	Whether password is required at segment signoff. 1 is true, 0 is false
validinterval	in	int	Override validity interval for certification1 is do not override
commentrequired	in	int	Whether comments are required for all items. 1 is true, 0 is false
certmethod	in	string	Certification method: 'S': single certifier, 'U': user class, 'A': entitlement authorizer, 'O': orgchart manager, 'R': defined relationship
singlecertifier	in	string	The user ID of the reviewer for single certifier campaign
orgmanagercertifi	<i>ei</i> n	string	The user ID of the reviewer for an orgchart campaign
notinuccertifier	in	string	The user ID of the reviewer for a not in userclass segment of a userclass cmapaign
defaultcertifier	in	string	The user ID of the default reviewer for a defined relationship campaign

Parameter	Direction	Size	Description
ucpmatching	in	string	The participants have to match which of the user classes ALL or ANY
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of members_vectorInput
resmembertype	in	string	The resource member type of the resource being certified. TARGET MANAGEDGROUP SOD ROLE USER USERCLASS ATTR RATR ALLRESOURCE
resourcetype	in	string	This field is expected if resmembertype = ALLRESOURCE otherwise empty It should contain the type of resource (TARGET, MANAGEDGROUP, ROLE, SOD) to include or if it contains ALL then all resources should be included.
rescertifier	in	string	Certifier for resource (only needed if certification by resource authorizer is used)
targetid	in	string	The ID of the target. This field is expected if resmembertype = TARGET or MANAGEDGROUP otherwise empty.
groupid	in	string	The ID of the managed group. This field is expected if resmembertype = MANAGEDGROUP otherwise empty.
sodid	in	string	The ID of an SOD rule. This field is expected if resmembertype = SOD otherwise empty.
roleid	in	string	The ID of a role. This field is expected if resmembertype = ROLE otherwise empty.
userid	in	string	A profile ID of the user being certified. This field is expected if resmembertype = USER otherwise empty.
userclassid	in	string	A user class defining the users to be certified. This field is expected if resmembertype = USERCLASS otherwise empty.

Parameter	Direction	Size	Description
attrid	in	string	An attribute ID to be displayed while certification is run if attribute is ATTR.
attrtype	in	string	Resource attribute type if attribute is RATR. Allowed values are MGRP, ROLE, TARG, SODR, MSYS, MACC, GRPAM, GRPGM
priority	in	int	The priority of the associated (see previous field) attribute.
remediationtype	in	string	Type of remediation: CERTACCTPDR CERTATTRPDR CERTAGRPPDR CERTCGRPPDR CERTNEWPDR CERTROLEPDR CERTUSERPDR CERTXFERPDR CERTSODPDR
remediationpdr	in	string	PDR for corresponding remediation type.
ucsegment	in	string	User class ID for certification by userclass
uccertifier	in	string	Certifier for associated userclass for segment
ucpsegment	in	string	User class ID for certification by defined relationship
certifieractor	in	string	Actor for CERTIFIER
userunderreviewa	ac <b>ho</b> r	string	Actor for USER_UNDER_REVIEW
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CertStartCertCampaign_vectorOutput
certsig	out	string	The ID identifying the certification round.

# 3.7.28 CertStartSavedRound (Bravura Identity, Bravura Privilege, Access Certifier)

Starts a saved certification campaign. The API login must be established by an admin who has the ACLs to manage certification and initiate API calls.

## Form of Request

#### Form of Response

#### **3.7.28.1** Parameters

Parameter	Direction	Size	Description
savedcertid	in	string	The ID identifying the saved certification campaign.
certdesc	in	string	Certification campaign description.
emailcontent	in	string	Email content to be sent.
segdesc	in	string	Segmentation description.
intervaldays	in	int	Number of days to wait between sending out invitation.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CertStartSavedRound_vectorOutput
certsig	out	string	The ID identifying the certround.

# 3.7.29 CertStartSingleCertifierConfigRound (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*)

Start a single reviewer configuration certification campaign. The API login must be established by an admin who has the ACLs to initiate API calls.

# Form of Request

```
<CertStartSingleCertifierConfigRoundRequest>
    <certdesc>...</certdesc>
    <certifier>...
    <initiator>...</initiator>
    <emailcontent>...
    <seqdesc>...</seqdesc>
    <intervaldays>...</intervaldays>
    <instructions>...</instructions>
    <sessdat>...</sessdat>
    <input>...</input>
</CertStartSingleCertifierConfigRoundRequest>
<CertStartSingleCertifierConfigRound_vectorInput>
    <resmembertype>...</resmembertype>
    <resourcetype>...</resourcetype>
    <sodid>...</sodid>
    <roleid>...</roleid>
</CertStartSingleCertifierConfigRound_vectorInput>
```

#### Form of Response

## 3.7.29.1 Parameters

Parameter	Direction	Size	Description	
certdesc	in	string	Certification campaign description.	

Parameter	Direction	Size	Description
certifier	in	string	The user ID of the reviewer.
initiator	in	string	The user ID of the initiator - must have ACL for certification.
emailcontent	in	string	Email content to be sent.
segdesc	in	string	Segmentation description.
intervaldays	in	int	Number of days to wait between sending out invitation.
instructions	in	string	Initiator instructions to certifier.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of members_vectorInput
resmembertype	in	string	The resource member type of the resource being certified. SOD ROLE ALLRESOURCE
resourcetype	in	string	This field is expected if resmembertype = ALLRESOURCE otherwise empty It should contain the type of resource (ROLE, SOD) to include or if it contains ALL then all resources should be included.
sodid	in	string	The ID of an SOD rule. This field is expected if resmembertype = SOD otherwise empty.
roleid	in	string	The ID of a role. This field is expected if resmembertype = ROLE otherwise empty.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
			parameters continued on next page

Parameter	Direction	Size	Description
output	out	array	An array of CertStartSingleCertifierConfigRound_vectorOutput
certsig	out	string	The ID identifying the certround.

# 3.7.30 CertStartSingleUserRound (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*)

Start a selected user certification campaign. The API login must be established by an admin who has the ACLs to initiate API calls.

### Form of Request

```
<CertStartSingleUserRoundReguest>
   <certdesc>...</certdesc>
   <certifier>...
   <initiator>...</initiator>
   <emailcontent>...
   <seqdesc>...</seqdesc>
   <intervaldays>...</intervaldays>
   <groupmembertype>...
   <includeprofiles>...</includeprofiles>
   <includeprofileattributes>...</includeprofileattributes>
   <enablecomparison>...
   <attributegroup>...</attributegroup>
   <minimumcomparison>...
   <lowerthreshold>.../lowerthreshold>
   <upperthreshold>...</upperthreshold>
   <instructions>...</instructions>
   <signoffpasswdrequired>...</signoffpasswdrequired>
   <validinterval>...</validinterval>
   <commentrequired>...</commentrequired>
   <sessdat>...</sessdat>
   <input>...</input>
</CertStartSingleUserRoundRequest>
<CertStartSingleUserRound_vectorInput>
   <resmembertype>...</resmembertype>
   <resourcetype>...</resourcetype>
   <targetid>...</targetid>
   <groupid>...
   <sodid>...</sodid>
   <roleid>...</roleid>
   <userid>...</userid>
   <userclassid>...</userclassid>
   <attrid>...</attrid>
   <attrtype>...</attrtype>
   <priority>...</priority>
   <remediationtype>...</remediationtype>
   <remediationpdr>...</remediationpdr>
</CertStartSingleUserRound_vectorInput>
```

#### Form of Response

```
<CertStartSingleUserRoundResponse>
     <errmsg>...</errmsg>
```

# 3.7.30.1 Parameters

Parameter	Direction	Size	Description
certdesc	in	string	Certification campaign description.
certifier	in	string	The user ID of the reviewer.
initiator	in	string	The user ID of the initiator - must have ACL for certification.
emailcontent	in	string	Email content to be sent.
segdesc	in	string	Segmentation description.
intervaldays	in	int	Number of days to wait between sending out invitation.
groupmembertyp	oe in	string	Group membership types to review. Default is 'M' if not specified. 'A' = accounts only, 'S' = subgroups only, 'M' = accounts and subgroups
includeprofiles	in	int	Include profiles flag. 1 is true, 0 is false
includeprofileattr	ibüntes	int	Include profile attributes flag. 1 is true, 0 is false
enablecomparisc	on in	int	Enable comparison by attributes. 1 is true, 0 is false
attributegroup	in	string	Attribute group that collects users into peer groups.
minimumcompar	isom	int	The minimum number of peers that a user must have to be compared.

Parameter	Direction	Size	Description
lowerthreshold	in	int	Lower threshold when comparing percentage of peers with same entitlement
upperthreshold	in	int	Upper threshold when comparing percentage of peers with same entitlement
instructions	in	string	Initiator instructions to certifier.
signoffpasswdrequ	uired	int	Whether password is required at segment signoff. 1 is true, 0 is false
validinterval	in	int	Override validity interval for certification1 is do not override
commentrequired	in	int	Whether comments are required for all items. 1 is true, 0 is false
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of members_vectorInput
resmembertype	in	string	The resource member type of the resource being certified. TARGET MANAGEDGROUP SOD ROLE USER USERCLASS ATTR RATR ALLRESOURCE
resourcetype	in	string	This field is expected if resmembertype = ALLRESOURCE otherwise empty It should contain the type of resource (TARGET, MANAGEDGROUP, ROLE, SOD) to include or if it contains ALL then all resources should be included.
targetid	in	string	The ID of the target. This field is expected if resmembertype = TARGET or MANAGEDGROUP otherwise empty.
groupid	in	string	The ID of the managed group. This field is expected if resmembertype = MANAGEDGROUP otherwise empty.
sodid	in	string	The ID of an SOD rule. This field is expected if resmembertype = SOD otherwise empty.
			parameters continued on next page

Parameter	Direction	Size	Description
roleid	in	string	The ID of a role. This field is expected if resmembertype = ROLE otherwise empty.
userid	in	string	A profile ID of the user being certified. This field is expected if resmembertype = USER otherwise empty.
userclassid	in	string	A user class defining the users to be certified. This field is expected if resmembertype = USERCLASS otherwise empty.
attrid	in	string	An attribute ID to be displayed while certification is run.
attrtype	in	string	Resource attribute type if attribute is RATR. Allowed values are MGRP, ROLE, TARG, SODR, MSYS, MACC, GRPAM, GRPGM
priority	in	int	The priority of the associated (see previous field) attribute.
remediationtype	in	string	Type of remediation: CERTACCTPDR CERTATTRPDR CERTAGRPPDR CERTCGRPPDR CERTNEWPDR CERTROLEPDR CERTUSERPDR CERTXFERPDR CERTSODPDR
remediationpdr	in	string	PDR for corresponding remediation type.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CertStartSingleUserRound_vectorOutput
certsig	out	string	The ID identifying the certround.

# 3.7.31 CertStartSingleUserRoundForGroups (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*)

Start a selected user U certification campaign. The API login must be established by an admin who has the ACLs to initiate API calls and start cert rounds. The groups in this round cannot be configured with API parameters. Those groups that U is a member of are automatically included in round.

### Form of Request

#### Form of Response

# 3.7.31.1 Parameters

Parameter	Direction	Size	Description
certdesc	in	string	Certification campaign description.

Parameter	Direction	Size	Description
defaultreviewer	in	string	The user ID of the default reviewer (if there is no group owner).
certifiee	in	string	The ID of the user that this round is centered on.
initiator	in	string	The user ID of the initiator - must have ACL for certification.
emailcontent	in	string	Email content to be sent.
segdesc	in	string	Segmentation description.
intervaldays	in	int	Number of days to wait between sending out invitation.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of members_vectorInput
remediationtype	in	string	Type of remediation: CERTACCTPDR CERTATTRPDR CERTAGRPPDR CERTCGRPPDR CERTNEWPDR CERTROLEPDR CERTUSERPDR CERTXFERPDR CERTSODPDR
remediationpdr	in	string	PDR for corresponding remediation type.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CertStartSingleUserRoundForGroups_vectorOutput
certsig	out	string	The ID identifying the certround.

# 3.7.32 CheckoutParamsGet (*Bravura Security Fabric*)

Verify a checkout id is valid.

CheckoutParamsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

# Form of Request

## Form of Response

### 3.7.32.1 Parameters

Parameter	Direction	Size	Description
checkoutid	in	string	Unique checkout ID to verify.
pluginid	in	string	Name of the clicked disclosure plugin
accountid	in	string	Name of the account to disclose

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CheckoutParamsGet_vectorOutput
key	out	string	The kvg key.
value	out	string	The kvg value.

# 3.7.33 CheckoutStatusGet (Bravura Security Fabric)

#### Get the status of a checkout

# Form of Request

## Form of Response

### **3.7.33.1 Parameters**

Parameter	Direction	Size	Description
checkoutid	in	string	Unique checkout IDs to verify.
accountid	in	string	Name of the account to verify
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of CheckoutStatusGet_vectorOutput
			narameters continued on next nage

Parameter	Direction	Size	Description
status	out	string	Status of the checkout. Can be checked out (O), checked in (I), pending (P), closed (C), expired (E), or revoked (R).

# 3.7.34 DelegationCancel (Bravura Security Fabric)

Cancel the delegations matching the search criteria.

## Form of Request

# Form of Response

## **3.7.34.1 Parameters**

Parameter	Direction	Size	Description
guid	in	string	The delegation GUID.
primary	in	string	The profile ID of the user whose responsibility will be delegated.
deleg	in	string	A profile ID for the delegate.
type	in	string	The type of the delegation. It could be one of BATCH, CERT, TASK or ALL.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.35 DelegationList (*Bravura Security Fabric*)

List the delegations matching the search criteria.

DelegationList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

```
<DelegationListResponse>
   <errmsg>...</errmsg>
   <handle>...</handle>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...
</DelegationListResponse>
<DelegationList_vectorOutput>
   <quid>...</quid>
   <primary>...</primary>
   <lastprimary>...
   <deleg>...</deleg>
   <type>...</type>
   <batchid>...
   <seqid>...</seqid>
   <itemsig>...</itemsig>
   <startdate>...</startdate>
   <enddate>...</enddate>
   <delegable>...</delegable>
   <acceptneed>...</acceptneed>
   <resptime>...</resptime>
</DelegationList vectorOutput>
```

#### **3.7.35.1 Parameters**

Parameter	Direction	Size	Description
primary	in	string	The profile ID of the user whose responsibility will be delegated.
deleg	in	string	A profile ID for the delegate.
type	in	string	The type of the delegation. It could be one of BATCH, CERT, TASK or ALL.
activeonly	in	int	Only show active delegations?
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of DelegationList_vectorOutput
guid	out	string	The delegation GUID.
primary	out	string	The profile ID of the user whose responsibility will be delegated.
lastprimary	out	string	The latest primary profile name at the time.
deleg	out	string	A profile ID for the delegate.
			parameters continued on next page

Parameter	Direction	Size	Description
type	out	string	The type of the delegation. It could be one of BATCH, CERT, TASK or ALL.
batchid	out	string	The request that the delegation is restricted to.
segid	out	string	The certification segment that the delegation is restricted to.
itemsig	out	string	The request item (for implementation) that the delegation is restricted to.
startdate	out	string	Take effect as of this date, in UTC, ISO format. This should have a valid date for every delegation.
enddate	out	string	Stop delegating as of this date, in UTC, ISO format. If empty, the delegation is open-ended.
delegable	out	int	Can this delegation be sub-delegated?
acceptneed	out	int	Is the delegate required to accept the responsibility.
resptime	out	string	When we will cause the default action to occur, if acceptneed is set to true.

# 3.7.36 DigitalIDGet (*Bravura Security Fabric*)

### Retrieves Digital ID attributes

DigitalIDGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

```
<DigitalIDGetResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</DigitalIDGetResponse>
<DigitalIDGet_vectorOutput>
    <nosid>...</nosid>
    <serverid>...</serverid>
    <location>...
    <password>...</password>
    <didfile>...</didfile>
    <didmd5>...</didmd5>
    <forceflag>...</forceflag>
</DigitalIDGet_vectorOutput>
```

#### 3.7.36.1 Parameters

Parameter	Direction	Size	Description	
longid	in	string	The account ID.	
targetid	in	string	The target ID.	

Parameter	Direction	Size	Description
workstnid	in	string	The workstation ID.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of DigitallDGet_vectorOutput
nosid	out	string	The Network Operating System ID.
serverid	out	string	The server ID.
location	out	string	The Digital ID file location on the workstation.
password	out	string	The password used to encrypt the Digital ID file.
didfile	out	string	The Digital ID file.
didmd5	out	string	The MD5 checksum of Digital ID File.
forceflag	out	int	Whether to prefer the Digital ID in the <i>Hitachi ID Bravura Security Fabric</i> database over the workstation file. 1 is true, 0 is false

# 3.7.37 DigitalIDSet (Bravura Security Fabric)

## Sets Digital ID attributes

### Form of Request

## Form of Response

### **3.7.37.1 Parameters**

Parameter	Direction	Size	Description
longid	in	string	The user profile ID.
targetid	in	string	The target ID.
workstnid	in	string	The workstation ID.
nosid	in	string	The Network Operating System ID.
password	in	string	The password used to encrypt the Digital ID file.
serverid	in	string	The server ID.
didloc	in	string	The Digital ID file location on the workstation.
			parameters continued on next page

Parameter	Direction	Size	Description
didfile	in	string	The Base64 encoded digital ID file.
forceflag	in	int	Whether to prefer the Digital ID in the <i>Hitachi ID</i> Bravura Security Fabric database over the workstation file. 1 is true, 0 is false
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.38 DiscoveredSystemAttrGet (Bravura Privilege)

Retrieves key/value attribute pair(s) from a given discovered system.

DiscoveredSystemAttrGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

# 3.7.38.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The import id of the discovered system.
key	in	string	The key to retrieve. Leave blank to retrieve all keys for this discovered system.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of DiscoveredSystemAttrGet_vectorOutput
key	out	string	The key retrieved.
value	out	string	The value of the attribute.

# 3.7.39 DiscoveredSystemGetByAttr (Bravura Privilege)

Retrieves all discovered systems with the given attribute.

DiscoveredSystemGetByAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

#### 3.7.39.1 Parameters

Parameter	Direction	Size	Description
matchAny	in	int	Flag indicating whether search should match on any of the criteria (1) or all of the criteria (0).

Parameter	Direction	Size	Description
1 . 4			<del>-</del>
key1	in	string	The key of the attribute to search on.
value1	in	string	Optional. The value of the attribute to search on. If unspecified, attribute values will be ignored during searches and the mere existence of the attribute will affect output.
key2	in	string	Optional. The key of the second attribute to search on.
value2	in	string	Optional. The value of the second attribute to search on. If unspecified, attribute values will be ignored during searches and the mere existence of the attribute will affect output.
key3	in	string	Optional. The key of the third attribute to search on.
value3	in	string	Optional. The value of the third attribute to search on. If unspecified, attribute values will be ignored during searches and the mere existence of the attribute will affect output.
key4	in	string	Optional. The key of the fourth attribute to search on.
value4	in	string	Optional. The value of the fourth attribute to search on. If unspecified, attribute values will be ignored during searches and the mere existence of the attribute will affect output.
key5	in	string	Optional. The key of the fifth attribute to search on.
value5	in	string	Optional. The value of the fifth attribute to search on. If unspecified, attribute values will be ignored during searches and the mere existence of the attribute will affect output.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of DiscoveredSystemGetByAttr_vectorOutput
id	out	string	The ID of a discovered system that matches the given key/value pair.

# 3.7.40 EntAttrsDel (*Bravura Security Fabric*)

Delete entitlement attributes matching a given set of criteria.

### Form of Request

### Form of Response

### **3.7.40.1 Parameters**

Parameter	Direction	Size	Description
enttype	in	string	The type of entitlement. This must be one of the types returned by EntTypesList.

Parameter	Direction	Size	Description
res_id	in	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the profile ID of the user</li> </ul>
			RMBR (Role memberships) : the ID of the role
res_id2	in	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules) : not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
res2_id	in	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the account</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the ID of an SOD rule</li> </ul>
			<ul> <li>RMBR (Role memberships): the profile ID of the user</li> </ul>

Parameter	Direction	Size	Description
res2_id2	in	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the long ID of the account</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules) : not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attributes_vectorInput
name	in	string	The name of the attribute.
value	in	string	The value to delete. If empty, delete all values for the specified attribute.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

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# 3.7.41 EntAttrsGet (Bravura Security Fabric)

Get a list of entitlement attributes matching a given set of criteria.

EntAttrsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

#### Form of Response

```
<EntAttrsGetResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</EntAttrsGetResponse>
<EntAttrsGet_vectorOutput>
    <enttype>...</enttype>
    <res_id>...</res_id>
    <res_id2>...</res_id2>
    <res2_id>...</res2_id>
    <res2 id2>...</res2 id2>
    <attrkey>...</attrkey>
    <value>...</value>
</EntAttrsGet_vectorOutput>
```

#### 3.7.41.1 Parameters

Parameter	Direction	Size	Description
enttype	in	string	The type of entitlement. This must be one of the types returned by EntTypesList.
res_id	in	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the profile ID of the user</li> </ul>
			RMBR (Role memberships) : the ID of the role
res_id2	in	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
res2_id	in	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the account</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the ID of an SOD rule</li> </ul>
			<ul> <li>RMBR (Role memberships): the profile ID of the user</li> </ul>

Parameter	Direction	Size	Description
res2_id2	in	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the long ID of the account</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules) : not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
attrkey	in	string	The name of the attribute to get.
attrval	in	string	The value of the attribute to get.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of EntAttrsGet_vectorOutput
enttype	out	string	The type of entitlement.

Parameter	Direction	Size	Description
res_id	out	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the profile ID of the user</li> </ul>
			RMBR (Role memberships) : the ID of the role
res_id2	out	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules) : not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
res2_id	out	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the account</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the ID of an SOD rule</li> </ul>
			<ul> <li>RMBR (Role memberships): the profile ID of the user</li> </ul>

Parameter	Direction	Size	Description
res2_id2	out	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the long ID of the account</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
attrkey	out	string	The name of the attribute.
value	out	string	The value of the attribute.

# 3.7.42 EntAttrsSet (*Bravura Security Fabric*)

Sets the entitlement attribute values.

# Form of Request

### Form of Response

### 3.7.42.1 Parameters

Parameter	Direction	Size	Description
enttype	in	string	The type of entitlement. This must be one of the types returned by EntTypesList.

Parameter	Direction	Size	Description
res_id	in	string	The ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the host ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the host ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the profile ID of the user</li> </ul>
			RMBR (Role memberships) : the ID of the role
res_id2	in	string	The second part of the ID of the resource:
			<ul> <li>GRPAM (Group account memberships): the ID of the group</li> </ul>
			<ul> <li>GRPGM (Group group memberships): the ID of the parent group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules) : not applicable</li> </ul>
			RMBR (Role memberships) : not applicable
res2_id	in	string	The ID of the resource:
			GRPAM (Group account memberships) : the host ID of the account
			<ul> <li>GRPGM (Group group memberships): the host ID of the child group</li> </ul>
			<ul> <li>SODR (Segregation of duties rules): the ID of an SOD rule</li> </ul>
			<ul> <li>RMBR (Role memberships): the profile ID of the user</li> </ul>

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# 3.7.43 EntTypesList (Bravura Security Fabric)

Lists supported entitlement types for use with EntAttrsGet, EntAttrsDel, and EntAttrsSet.

EntTypesList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### 3.7.43.1 Parameters

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of EntTypesList_vectorOutput
name	out	string	The name of the entitlement type.
description	out	string	The description of the entitlement type.

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# 3.7.44 ExtDBQueryExec (*Bravura Security Fabric*)

Executes an SQL query against an ODBC data source, returning a result set if any.

ExtDBQueryExec streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

# Form of Response

#### 3.7.44.1 Parameters

Parameter	Direction	Size	Description
query	in	string	The SQL query.
inclnames	in	int	Set to non-zero if the first record returned in the result set should be the column names.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of bindvalues_vectorInput
bindvalue	in	string	A value for binding against a parameterized query.  The bind values must be specified in the same order as the parameter markers that they correspond to in the query.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ExtDBQueryExec_vectorOutput
numcol	out	int	The number of columns in the result set. Zero if the query did not produce a result set.
colidx	out	int	The zero-based index of the column to which the returned value belongs.
value	out	string	A result set value. Each record of the result set is returned one column value at a time.

# 3.7.45 GenericCheckoutDisclose (*Bravura Privilege*)

Discloses passwords provided by a generic check-out

GenericCheckoutDisclose streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

# 3.7.45.1 Parameters

Parameter	Direction	Size	Description
checkoutid	in	string	A check-out ID whose password access is to be disclosed.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of GenericCheckoutDisclose_vectorOutput
acctid	out	string	The account ID.
wstnid	out	string	The workstation ID.
password	out	string	The password.

# 3.7.46 GenericCheckoutStatusGet (Bravura Privilege)

Gets the status of a check-out.

# Form of Request

#### Form of Response

## 3.7.46.1 Parameters

Parameter	Direction	Size	Description
checkoutid	in	string	A check-out ID to retrieve the status of.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of GenericCheckoutStatusGet_vectorOutput

Parameter	Direction	Size	Description
status	out	string	The status code of this check-out. Refer to the status field in the pamchkout table in <i>Bravura Security Fabric</i> Data Dictionary (schema-doc.pdf) to interpret this value.

# 3.7.47 GetRequestCheckoutID (Bravura Privilege)

Returns a check-out id given a batchid.

GetRequestCheckoutID streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.47.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for a password/groupset/accountset check-out.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

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# 3.7.48 GroupParentGet (*Bravura Security Fabric*)

Lists parents of a specified managed group.

GroupParentGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### 3.7.48.1 Parameters

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target.
groupid	in	string	The ID of the managed target group.
directonly	in	int	Whether to list only direct parent groups of the given group, or all ancestor groups of the given group. 0(zero)=list all ancestor groups of the given group, otherwise list only direct parent groups.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of GroupParentGet_vectorOutput
targetid	out	string	The ID of the target.
groupid	out	string	The ID of the managed target group that is a direct parent or ancestor group.

# 3.7.49 ImplementerResourceList (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Lists the resources the implementer is statically assigned to.

ImplementerResourceList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## 3.7.49.1 Parameters

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the implementer.
inherited	in	int	If set to 0, only return implementers directly assigned to the resource. If non-zero, also return inherited implementers.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ImplementerResourceList_vectorOutput
resourceid	out	string	The ID of the resource.
restype	out	string	The type of resource. This must be one of the types returned by ResourceTypesList.
inherited	out	int	Whether the implementer was inherited.

# 3.7.50 InstanceDBConfigGet (Bravura Security Fabric)

Gets the database configuration for the local node.

# Form of Request

#### Form of Response

## 3.7.50.1 Parameters

	Size	Description
in	strina	The session handle from the previous API call.
	String	The decision handle from the provided 7th Fedin.
out	string	A message describing the error or success resulting from the API call.
out	int	The return code from the API call.
out	string	The session handle for the next API call.
out	array	An array of InstanceDBConfigGet_vectorOutput
out	string	Database authentication mode
	out out out	out string  out int  out string  out array

Parameter	Direction	Size	Description
dbuser	out	string	Account used to connect to database
4,54507	out	oung	7 loose in dood to connoct to database
dbserver	out	string	Database server and optional instance name.
dbname	out	string	The name of the database.

# 3.7.51 InstanceDBConfigSet (Bravura Security Fabric)

Sets database configuration values.

## Form of Request

## Form of Response

# **3.7.51.1 Parameters**

Parameter	Direction	Size	Description
dbuser	in	string	The user to use to connect to the database.
dbpwd	in	string	The password to use to connect to the database.
		3	
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
onneg	out	oung	from the API call.
rc	out	int	The return code from the API call.
10	out	III	The return code from the Ar Foall.
sessdat	out	string	The session handle for the next API call.

# 3.7.52 InstanceGet (*Bravura Security Fabric*)

Returns information about the instance on which the API server is running (not the instance, if any, from which the API was initiated).

## Form of Request

#### Form of Response

## 3.7.52.1 Parameters

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of InstanceGet_vectorOutput
instance	out	string	Name of instance.

Parameter	Direction	Size	Description
address	out	string	Address of instance.
guid	out	string	Globally unique identifier of the instance.

# 3.7.53 InstanceList (*Bravura Security Fabric*)

Returns a list of all instances in the configuration. Replicating and shared schema peers are returned. The local instance will be included in the result set.

InstanceList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

# 3.7.53.1 Parameters

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next pa

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of InstanceList_vectorOutput
address	out	string	Address of instance.
port	out	int	Port number iddb service is listening on.
active	out	int	A boolean that indicates if the instance is alive. Value is 1 if the instance is alive. 0 otherwise.

# 3.7.54 InstanceProxyList (*Bravura Security Fabric*)

Returns a list of all proxies in the configuration.

InstanceProxyList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.54.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of InstanceProxyList_vectorOutput
address	out	string	Address of proxy.
port	out	int	Port number proxy service is listening on.

# 3.7.55 InstanceRunUtility (*Bravura Security Fabric*)

## Runs instance utilities asynchronously Form of Request

# Form of Response

#### **3.7.55.1 Parameters**

Parameter	Direction	Size	Description
command	in	string	The command to run. Allowed commands are:
			<ul> <li>updinst-extdb: updinst.exe -extdb</li> </ul>
			<ul> <li>psupdate-listdiscovered-full: psupdate.exe -list -loaddb -targetdiscovered -targetmanual -import</li> </ul>
reserved1	in	string	Place reserved for future use.
reserved2	in	string	Place reserved for future use.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.56 InstanceStatus (*Bravura Security Fabric*)

Returns a key-value list that describes various elements of an instance's status.

InstanceStatus streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

# Form of Request

#### Form of Response

# 3.7.56.1 Parameters

Parameter	Direction	Size	Description
address	in	string	Address of instance.
port	in	int	Port number iddb service is listening on.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of InstanceStatus_vectorOutput
key	out	string	The status metric's name.
value	out	string	The status metric's value.

# 3.7.57 KMKeyGetByAccount (*Bravura Privilege*)

Tries to fetch the password of a managed account on a specified resource that is managed by *Hitachi ID Bravura Privilege*. The password expiry time is returned as well. It is the user's responsibility not to use the password for any purpose when it is almost expired. The password can be changed around its expiry time by *Bravura Privilege* dynamically. See Using the API to retrieve administrative passwords in the Bravura Security Fabric *Documentation* for more information regarding the pre-requisites for using this function.

#### Form of Request

#### Form of Response

#### **3.7.57.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The resource ID where the managed account ID is hosted.
accountid	in	string	The long ID of the managed account in the resource
ip	in	string	The IP address of the resource where the managed account is hosted.

Parameter	Direction	Size	Description
host	in	string	The DNS hostname of the resource where the managed account is hosted.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of KMKeyGetByAccount_vectorOutput
password	out	string	The password of the account ID in the resource.
expirytime	out	string	The approximate ISO-formatted UTC expiry time of this password.

# 3.7.58 LargeCredentialGet (*Bravura Privilege*)

Retrieves large credential file in chunks

LargeCredentialGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.58.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The target ID.
longid	in	string	The account (file) ID.
attrkey	in	string	The account file attribute key.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of LargeCredentialGet_vectorOutput
filename	out	string	The file name.
filechunknum	out	int	The file content chunk number.
filechunk	out	string	The file content chunk.
md5CheckSum	out	string	The MD5 checksum of whole file. Only the last record will have this populated.

# 3.7.59 LicenseCountsList (*Bravura Security Fabric*)

Retrieves license compliance object counts.

#### Form of Request

#### Form of Response

## **3.7.59.1 Parameters**

Parameter	Direction	Size	Description
force	in	int	Recompute the license status rather than just retrieving the cached status. 0 = use the cached status, otherwise recompute
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
			parameters continued on next page

Parameter	Direction	Size	Description
output	out	array	An array of LicenseCountsList_vectorOutput
objname	out	string	The name of the object being counted. This is empty for global license errors, such as an expired or invalid license.
currentcount	out	int	The current number of these objects in use
maxcount	out	int	The maximum number of these objects permitted by the license
tag	out	string	Language tag describing the current licensing status, if any
severity	out	int	Severity code for the current licensing status. 0 = OK, 1 = imminent, 2 = reached, 3 = exceeded

# 3.7.60 LicensedProductList (Bravura Security Fabric)

Lists the products licensed for the current instance.

## Form of Request

## Form of Response

## 3.7.60.1 Parameters

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of LicensedProductList_vectorOutput
name	out	string	Nickname of licensed product. Maybe be one of the following: idarchive, pamlite, idaccess, idcertify, idtrack, iddiscover, idorg, idsynch, ivr, lite, other, psynch, sso, idrole

# 3.7.61 LocalCounterGet (*Bravura Security Fabric*)

Atomically gets the current value of the local counter. Note that the value can change after this function returns.

## Form of Request

## Form of Response

#### **3.7.61.1 Parameters**

Parameter	Direction	Size	Description
name	in	string	Name of the local counter.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of LocalCounterGet_vectorOutput
value	out	int	Current value of the local counter.

# 3.7.62 LocalCounterGetAndIncrement (*Bravura Security Fabric*)

Atomically gets and increments the local counter. If the local counter was never set, the local counter will automatically be created and initialized to 0.

## Form of Request

#### Form of Response

#### **3.7.62.1 Parameters**

Parameter	Direction	Size	Description
name	in	string	Name of the local counter.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of LocalCounterGetAndIncrement_vectorOutput

Parameter	Direction	Size	Description
value	out	int	Current value of the local counter.

# 3.7.63 LocalCounterSet (*Bravura Security Fabric*)

Atomically sets the local counter to the given value. Note that first use of an uninitialized LocalCounter will automatically set the value to start at 0.

## Form of Request

## Form of Response

#### **3.7.63.1 Parameters**

Parameter	Direction	Size	Description
name	in	string	Name of the local counter.
value	in	int	Value to set the local counter to.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
-		-	from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.64 LogEvent (Bravura Security Fabric)

Logs an event.

## Form of Request

## Form of Response

#### **3.7.64.1 Parameters**

Leave this string empty to indicate the current	Parameter	Direction	Size	Description
this string empty to indicate the current time.  eventtype in string The event type that is to be logged.  userid in string The user ID to be used in the event log.  hostid in string The host ID to be used in the event log.	starttime	in	string	The ISO-formatted UTC starting time of the event. Leave this string empty to indicate the current time.
userid     in     string     The user ID to be used in the event log.       hostid     in     string     The host ID to be used in the event log.	endtime	in	string	The ISO-formatted UTC end time of the event. Leave this string empty to indicate the current time.
hostid in string The host ID to be used in the event log.	eventtype	in	string	The event type that is to be logged.
	userid	in	string	The user ID to be used in the event log.
hostname in string The host name to be used in the event log.	hostid	in	string	The host ID to be used in the event log.
	hostname	in	string	The host name to be used in the event log.

Parameter	Direction	Size	Description
longid	in	string	The long ID to be used in the event log.
resultcode	in	int	The result code to log. 0 is success, -1 is failure.
result	in	string	The result message to log.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.65 Login (Bravura Security Fabric)

Establishes a session on the server with the given ID and password. The login process uses the authentication list configured through the *Manage the system* (PSA) module. The session is available (and necessary) for future API calls.

## Form of Request

#### Form of Response

#### **3.7.65.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user who is connecting.
password	in	string	The password used to authenticate the login process.
isadmin	in	int	Reserved.
options	in	string	(Optional) Additional login parameters, separated by semi-colons. Currently, these are the only supported parameters:
			<ul> <li>AuthConsoleUser = <consoleuserid>: Validate the password against a console user instead of the user's account on a target system. The resulting API session will still have userid as the logged-in user.</consoleuserid></li> </ul>
sessdat	in	string	An empty value.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.66 LoginEx (*Bravura Security Fabric*)

Establishes a session on the server with the given ID and password of a console user. This console user should have at least the OTP Caller ACL. The session is available (and necessary) for future API calls. The returned new password is used for future Login or LoginEx calls.

## Form of Request

### Form of Response

#### **3.7.66.1 Parameters**

Parameter	Direction	Size	Description
aid	in	string	A console user ID.
арw	in	string	The console user's password.
sessdat	in	string	An empty value.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description	
output	out	array	An array of LoginEx_vectorOutput	
newapw	out	string	The new password.	

# 3.7.67 Logout (Bravura Security Fabric)

Closes the connection to the server and ends the session. A new session must be established using Login or LoginEx before further API calls can be made.

## Form of Request

## Form of Response

## 3.7.67.1 Parameters

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The invalidated session handle.

# 3.7.68 MAQCreate (Bravura Privilege)

Creates an account set. Requires the "Modify properties for this policy" ACL

## Form of Request

## Form of Response

#### **3.7.68.1 Parameters**

Parameter	Direction	Size	Description
maqid	in	string	The ID of the new account set.
description	in	string	The description of the new account set.
policyid	in	string	The managed system policy this account set may draw accounts from.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.69 MAQExplicitUserAdd (*Bravura Privilege*)

Adds an explicit user to an account set. Requires the "Modify properties for this policy" ACL

## Form of Request

## Form of Response

#### **3.7.69.1 Parameters**

Parameter	Direction	Size	Description
maqid	in	string	The account set to add to.
systemid	in	string	The ID of the managed system the account to add exists on.
accountid	in	string	The ID of the account to add.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.70 MAQExplicitUserDelete (*Bravura Privilege*)

Removes an explicit user from an account set. Requires the "Modify properties for this policy" ACL

## Form of Request

## Form of Response

#### **3.7.70.1 Parameters**

Parameter	Direction	Size	Description
maqid	in	string	The account set to remove from.
systemid	in	string	The ID of the managed system the account to remove exists on.
accountid	in	string	The ID of the account to remove.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.71 MAQMemberAccountList (*Bravura Privilege*)

Retrieves all member accounts of the given account set. Requires the "View properties for this policy" ACL

MAQMemberAccountList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.71.1 Parameters**

Parameter	Direction	Size	Description
maqid	in	string	The ID of the account set.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of MAQMemberAccountList_vectorOutput
accountid	out	string	The ID of the retrieved managed account.
wstnid	out	string	The ID of the managed system.

## 3.7.72 ManagedAccountAssociateWithService (*Bravura Privilege*)

Associates a subscriber with a managed account. Requires the "Manage systems on this policy" *Hitachi ID Bravura Privilege* ACL for a managed system policy that the managed system is a member of. Requires the "Pre-approved check-out of managed accounts" *Bravura Privilege* ACL for a managed system policy that the managed account is a member of.

#### Form of Request

### Form of Response

### 3.7.72.1 Parameters

Direction	Size	Description
in	string	The ID of the managed system on which the account the subscriber will subscribe to exists.
in	string	The account the subscriber will subscribe to.
in	string	The account ID as specified in the subscriber's configuration on its host.
in	string	The ID of the target on which the subscriber exists.
in	string	A URI for the subscriber.
	in in in	in string in string in string in string

Parameter	Direction	Size	Description
subscribertype	in	string	The type of the subscriber. Can be one of:  COM: DCOM object CUS: Custom GRP: User group IIS: IIS directory SVC: Service TAS: Scheduled task
notifytarget	in	int	Whether to update the new subscriber immediately. 1 means yes, otherwise no.
position	in	string	Optional. Position parameter to pass to agent if notifytarget = 1. Can be one of: pre, post.
restart	in	int	Optional. Restart parameter to pass to agent if notifytarget = 1. 1 means yes, otherwise no. Default no.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.73 ManagedAccountDetachFromService (Bravura Privilege)

Detach a managed account from a service. Requires the "Manage systems on this policy" *Hitachi ID Bravura Privilege* ACL for a managed system policy that the managed system is a member of. If the managed system is orphaned, the "Manage orphan managed systems" administrator ACL is required

### Form of Request

#### Form of Response

#### **3.7.73.1 Parameters**

Parameter	Direction	Size	Description
subscriberhost	in	string	The ID of the managed system.
servicetype	in	string	The type of the service.
servicename	in	string	The name of the service.
targetid	in	string	The target ID of the managed account
accountid	in	string	The login id of the managed account
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.

... parameters continued on next page

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Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.74 ManagedAccountImportPassword (*Bravura Privilege*)

Imports a password, directly setting it in the database and not running any agents or triggering pull-mode override. Non-vault accounts must exist and be attached to a policy but need not have a nonempty password. Vault accounts will be created if they do not exist already. Requires the "Randomize/override password of managed accounts" *Hitachi ID Bravura Privilege* ACL for the policy of the managed account, if the account already exists. If the account is a vault account that must be created, the "Modify properties for this policy" *Bravura Privilege* ACL on the vault system's primary policy is also required.

#### Form of Request

#### Form of Response

#### **3.7.74.1 Parameters**

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system.
accountid	in	string	The ID of the account to import.
password	in	string	The password to import for the account.
checkstrength	in	int	Whether to validate the password against its policy's password policy. 1 means yes, otherwise no.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.75 ManagedAccountOverridePassword (Bravura Privilege)

Overrides an existing managed account in a managed system or, if the system is a vault, creates a new account if one doesn't already exist. Requires the "Randomize/override password of managed accounts" *Hitachi ID Bravura Privilege* ACL for the policy of the managed account, if the account already exists. If the account is a vault account that must be created, the "Modify properties for this policy" *Bravura Privilege* ACL on the vault system's primary policy is also required.

## Form of Request

#### Form of Response

#### **3.7.75.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system.
accountid	in	string	The ID of the account to override or create.
password	in	string	The new password for the account.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedAccountOverridePassword_vectorOutput
workid	out	string	A unique identifier that can be used to query the results of this randomization using the PAMBatchResultsList function. Only populated for push-mode managed accounts.

# 3.7.76 ManagedAccountPasswordStatusGet (Bravura Privilege)

Retrieves the status of a managed account password.

#### Form of Request

## Form of Response

#### **3.7.76.1 Parameters**

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system.
accountid	in	string	The account ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of ManagedAccountPasswordStatusGet_vectorOutput
status	out	string	The status of the managed account's password.

## 3.7.77 ManagedAccountPolicyIDGet (Bravura Privilege)

Retrieves the managed system policy id of a managed account.

#### Form of Request

## Form of Response

#### **3.7.77.1 Parameters**

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system.
accountid	in	string	The account ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of ManagedAccountPolicyIDGet_vectorOutput
policyid	out	string	The managed system policy id the account is in.

# 3.7.78 ManagedAccountRandomizePassword (*Bravura Privilege*)

Randomizes the password on a single account for a single managed system. This function does not perform any synchronization across target system groups nor user profiles. Requires the "Randomize/override password of managed accounts" *Hitachi ID Bravura Privilege* ACL for a managed system policy of which the managed account is a member.

## Form of Request

#### Form of Response

## 3.7.78.1 Parameters

Parameter	Direction	Size	Description
systemid	in	string	The managed system ID of the account to reset.
longid	in	string	The account long ID to reset.
Torigia	111	String	The account long ib to reset.
sessdat	in	string	The session handle from the previous API call.
orrmea	out	string	A message describing the error or success resulting
errmsg	out	String	from the API call.
			The state of the ADI. II
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
ooodai	out	oung	The decision nation for the next / t Todii.

Parameter	Direction	Size	Description
output	out	array	An array of ManagedAccountRandomizePassword_vectorOutput
workid	out	string	A unique identifier that can be used to query the results of this randomization using the PAMBatchResultsList function.

# 3.7.79 ManagedAccountStatusGet (*Bravura Privilege*)

Retrieves whether an account is managed, discovered, or unknown to Hitachi ID Bravura Privilege.

#### Form of Request

## Form of Response

#### **3.7.79.1 Parameters**

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system.
accountid	in	string	The account ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedAccountStatusGet_vectorOutput
			parameters continued on next page

Parameter	Direction	Size	Description
status	out	string	The status of the account. M means managed, D means discovered but not managed, U means unknown to <i>Hitachi ID Bravura Privilege</i> .

## 3.7.80 ManagedAccountSubscriberList (Bravura Identity, Bravura Privilege, Access Certifier)

List all loaded subscribers.

ManagedAccountSubscriberList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

```
<ManagedAccountSubscriberListRequest>
    <handle>...</handle>
    <sessdat>...</sessdat>
</ManagedAccountSubscriberListRequest>
```

#### Form of Response

```
<ManagedAccountSubscriberListResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</ManagedAccountSubscriberListResponse>
<ManagedAccountSubscriberList_vectorOutput>
    <id>...</id>
    <targetid>...</targetid>
    <targetdesc>...</targetdesc>
    <accountid>...</accountid>
    <subscribertype>...</subscribertype>
    <objectname>...</objectname>
    <objectsid>...</objectsid>
</ManagedAccountSubscriberList vectorOutput>
```

## 3.7.80.1 Parameters

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedAccountSubscriberList_vectorOutput
id	out	string	The id of the subscriber.
targetid	out	string	The target of the managed account.
targetdesc	out	string	The description of the target.
accountid	out	string	The managed account ID.
subscribertype	out	string	The subscriber type. Possible values are SVC for managing services, IIS for managing IIS, TAS for managing scheduled tasks, GRP for managing group members, COM for managing DCOM, and CUS for managing custom accounts.
objectname	out	string	The managed object name, such as the service name, the IIS site name, the scheduled task name, the group name or the custom object name.
objectsid	out	string	The SID of the object.

## 3.7.81 ManagedSystemAttrAdd (*Bravura Privilege*)

Adds a key/value pair to a given managed system. The key defined must match a resource attribute defined in a resource attribute group of type "Managed systems". Requires read and write permissions to the resource attribute group. Requires the "Manage systems on this policy" *Hitachi ID Bravura Privilege* ACL for a managed system policy that the managed system is a member of. If the managed system is orphaned the "Manage orphan managed systems" administrator ACL is required.

#### Form of Request

### Form of Response

#### **3.7.81.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system.
key	in	string	The key to add.
value	in	string	The value to add.
seqno	in	int	The sequence number of a distinguished value for the same key. 0 (or omitted) denotes single value attribute, positive integer denotes multi value attribute.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.82 ManagedSystemAttrDelete (*Bravura Privilege*)

Deletes an attribute key/value pair from a managed system. The key defined must match a resource attribute defined in a resource attribute group of type "Managed systems". Requires read and write permissions to the resource attribute group. Requires the "Manage systems on this policy" *Hitachi ID Bravura Privilege* ACL for a managed system policy that the managed system is a member of. If the managed system is orphaned, the "Manage orphan managed systems" administrator ACL is required.

### Form of Request

#### Form of Response

#### 3.7.82.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system.
key	in	string	The key to delete.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
J		Ü	from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.83 ManagedSystemAttrGet (*Bravura Privilege*)

Retrieves a key/value attribute pair from a given managed system. The key defined must match a resource attribute defined in a resource attribute group of type "Managed systems". Requires read and write permissions to the resource attribute group.

ManagedSystemAttrGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### 3.7.83.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system.
key	in	string	The key to retrieve. Leave blank to retrieve all keys for
			this workstation.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemAttrGet_vectorOutput
key	out	string	The key retrieved.
value	out	string	The value of the attribute.
seqno	out	int	The sequence number of the retrieved value (for multi-valued attributes).

## 3.7.84 ManagedSystemCheckoutList (*Bravura Privilege*)

Retrieves checkouts for managed systems and accounts. Note: At least one of the following parameters, wstnid, acctid or recipientid, should be provided, in order to avoid returning all checkouts for all managed systems and accounts.

ManagedSystemCheckoutList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

```
<ManagedSystemCheckoutListResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</ManagedSystemCheckoutListResponse>
<ManagedSystemCheckoutList_vectorOutput>
    <wstnid>...</wstnid>
    <acctid>...</acctid>
    <status>...</status>
    <batchid>...</patchid>
    <checkouttime>...</checkouttime>
    <expiry>...</expiry>
    <checkintime>...</checkintime>
    <recipientid>...</recipientid>
</ManagedSystemCheckoutList_vectorOutput>
```

#### 3.7.84.1 Parameters

Parameter	Direction	Size	Description
wstnid	in	string	Optional. The id of the managed system to list checkouts for.
acctid	in	string	Optional. The id of the managed account to list checkouts for.
status	in	string	Optional. Status of the checkout. Can be checked out (O), checked in (I), pending (P), closed (C), expired (E), or revoked (R).
recipientid	in	string	Optional. Recipient of the checkout.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemCheckoutList_vectorOutput
wstnid	out	string	The id of the managed system.
acctid	out	string	The id of the managed account.
status	out	string	Status of the checkout. Can be checked out (O), checked in (I), pending (P), closed (C), expired (E), or revoked (R).

Parameter	Direction	Size	Description
batchid	out	string	The batch ID for the workflow request that caused this checkout, if applicable.
checkouttime	out	string	The time the password was checked out.
expiry	out	string	The time the checkout is scheduled to expire.
checkintime	out	string	The time the password was checked in, if applicable.
recipientid	out	string	The recipient of the checkout.

# 3.7.85 ManagedSystemDelete (*Bravura Privilege*)

Flags a managed system as deleted. Deleted managed systems are processed via the configured deletion policy.

## Form of Request

## Form of Response

#### **3.7.85.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system to delete.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.86 ManagedSystemDuplicateList (*Bravura Privilege*)

List all managed systems that share the specified attributes. For multi-valued attributes, the attributes will be considered identical as long as one of the values matches.

ManagedSystemDuplicateList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

```
<ManagedSystemDuplicateListResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</ManagedSystemDuplicateListResponse>
<ManagedSystemDuplicateList_vectorOutput>
    <id>...</id>
    <time>...</time>
    <attribute1>...</attribute1>
    <attribute2>...</attribute2>
    <attribute3>...</attribute3>
    <attribute4>...</attribute4>
    <attribute5>...</attribute5>
</ManagedSystemDuplicateList_vectorOutput>
```

### 3.7.86.1 Parameters

Parameter	Direction	Size	Description
attribute1	in	string	The name of the first attribute to use in the identification of duplicates.

Parameter	Direction	Size	Description
attribute2	in	string	The name of an optional second attribute to use in the identification of duplicates.
attribute3	in	string	The name of an optional third attribute to use in the identification of duplicates.
attribute4	in	string	The name of an optional fourth attribute to use in the identification of duplicates.
attribute5	in	string	The name of an optional fifth attribute to use in the identification of duplicates.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemDuplicateList_vectorOutput
id	out	string	The id of a managed system that was found to be a duplicate.
time	out	string	The last time the managed system was contacted.
			parameters continued on next page

Parameter	Direction	Size	Description
attribute1	out	string	If attribute1 was specified in the input, this will be populated with the value of the attribute for the specified managed system.
attribute2	out	string	If attribute2 was specified in the input, this will be populated with the value of the attribute for the specified managed system.
attribute3	out	string	If attribute3 was specified in the input, this will be populated with the value of the attribute for the specified managed system.
attribute4	out	string	If attribute4 was specified in the input, this will be populated with the value of the attribute for the specified managed system.
attribute5	out	string	If attribute5 was specified in the input, this will be populated with the value of the attribute for the specified managed system.

## 3.7.87 ManagedSystemGetByAttr (*Bravura Privilege*)

Retrieves all managed systems with the given attribute.

ManagedSystemGetByAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

#### **3.7.87.1 Parameters**

Parameter	Direction	Size	Description
key	in	string	The key of the attribute to search on.
value	in	string	Optional. The value of the attribute to search on. If unspecified, attribute values will be ignored during searches.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemGetByAttr_vectorOutput
id	out	string	The ID of a managed system that matches the given key/value pair.

# 3.7.88 ManagedSystemGuidTold (*Bravura Privilege*)

Retrieves the managed system ID of a managed system internal ID.

#### Form of Request

### Form of Response

## 3.7.88.1 Parameters

Parameter	Direction	Size	Description
systemid	in	string	The internal ID of the managed system.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemGuidToId_vectorOutput
id	out	string	The ID of a managed system that matches the given internal ID.

## 3.7.89 ManagedSystemList (Bravura Privilege)

List managed systems.

ManagedSystemList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

This function accepts and/or returns platform type ID values. See Platform Type ID Values for the list of possible values.

#### Form of Request

```
<ManagedSystemListRequest>
    <handle>...</handle>
    <workstnid>...
    <description>...</description>
    <ip>...</ip>
    <status>...</status>
    <ostype>...</ostype>
    <wstntype>...</wstntype>
    <osversion>...</osversion>
    <logonuser>...</logonuser>
    <url>...</url>
    <platform>...</platform>
    <deleted>...</deleted>
    <audittime>...</audittime>
    <sessdat>...</sessdat>
</ManagedSystemListRequest>
```

#### Form of Response

```
<ManagedSystemListResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</ManagedSystemListResponse>
<ManagedSystemList_vectorOutput>
    <workstnid>...</workstnid>
    <description>...</description>
    <ip>...</ip>
    <status>...</status>
    <ostype>...</ostype>
    <wstntype>...</wstntype>
    <osversion>...</osversion>
    <logonuser>...</logonuser>
    <url>...</url>
    <platform>...</platform>
    <deleted>...</deleted>
    <audittime>...</audittime>
```

# **3.7.89.1 Parameters**

Parameter	Direction	Size	Description
workstnid	in	string	ID of the workstation to locate. Can be empty.
description	in	string	ID of the workstation to locate. Can be empty.
ip	in	string	IP address of the workstation to locate. Can be empty.
status	in	string	Status of the workstation to locate. Can be Managed (M), Unmanaged (U), Inactive (I) or empty.
ostype	in	string	Type of the workstation to locate. Can be WINNT, WINNTS, WINNTDC, WIN2000, WIN2000S, WIN2000DC, WINXP, WIN2003S, WIN2003DC, UNIX, LINUX, IDM, SQL, ORACLE, WINVISTA, LONGHORN, WIN2008S, WIN2008DC, WINDOWS7, WINDOWS2008R2S, WIN2008R2DC.
wstntype	in	string	Type of the workstation to locate. Can be Workstation (W), Server (S), or empty.
osversion	in	string	Workstation/application version string.
logonuser	in	string	The ID of the last logged on user.
url	in	string	Optional URL with resource information.
platform	in	string	Optional platform type to filter on.
deleted	in	int	If not specified, list all active managed systems. If specified, only return systems that were deleted before the audittime date.
audittime	in	string	The last time the system was updated.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemList_vectorOutput
workstnid	out	string	ID of the workstation to locate. Can be empty.
description	out	string	ID of the workstation to locate. Can be empty.
ip	out	string	IP address of the workstation to locate. Can be empty.
status	out	string	Status of the workstation to locate. Can be Managed (M), Unmanaged (U), Inactive (I) or empty.
ostype	out	string	Type of the workstation to locate. Can be WINNT, WINNTS, WINNTDC, WIN2000, WIN2000S, WIN2000DC, WINXP, WIN2003S, WIN2003DC, UNIX, LINUX, IDM, SQL, ORACLE, WINVISTA, LONGHORN, WIN2008S, WIN2008DC, WINDOWS7, WINDOWS2008R2S, WIN2008R2DC.
wstntype	out	string	Type of the workstation to locate. Can be Workstation (W), Server (S), or empty.
			parameters continued on next page

Direction	Size	Description
out	string	Workstation/application version string.
out	string	The ID of the last logged on user.
out	string	Optional URL with resource information.
out	string	Optional platform type to filter on.
	-	
out	int	Whether or not the system has been flagged for deletion.
out	string	The last time the system was updated.
	out out out out out	out string out string out string out string out int

## 3.7.90 ManagedSystemMSPAccountCountList (*Bravura Privilege*)

Retrieves actively managed account counts on a managed system grouped by managed system policy Requires the "View properties for this policy" ACL

ManagedSystemMSPAccountCountList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

```
<ManagedSystemMSPAccountCountListRequest>
    <handle>...</handle>
    <systemid>...</systemid>
    <includeinvalid>...</includeinvalid>
    <sessdat>...</sessdat>
</ManagedSystemMSPAccountCountListRequest>
```

## Form of Response

```
<ManagedSystemMSPAccountCountListResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</ManagedSystemMSPAccountCountListResponse>
<ManagedSystemMSPAccountCountList_vectorOutput>
    <policyid>...</policyid>
    <count>...</count>
</ManagedSystemMSPAccountCountList_vectorOutput>
```

### 3.7.90.1 Parameters

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system.
includeinvalid	in	int	Optional. Include invalid accounts if true.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemMSPAccountCountList_vectorOutput
policyid	out	string	The ID of the policy.
count	out	int	The number of accounts belonging to the managed system in the managed system policy.

# 3.7.91 ManagedSystemManagedAccountList (*Bravura Privilege*)

Retrieves all actively managed accounts on a managed system Requires the "View properties for this policy" ACL

ManagedSystemManagedAccountList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

#### **3.7.91.1 Parameters**

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

... parameters continued on next page

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Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next
			call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemManagedAccountList_vectorOutput
accountid	out	string	The ID of the retrieved managed account.

## 3.7.92 ManagedSystemPoliciesList (Bravura Privilege)

Retrieves all managed system policies.

ManagedSystemPoliciesList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## 3.7.92.1 Parameters

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next page

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemPoliciesList_vectorOutput
id	out	string	The ID of the managed system policy.
owner	out	string	The owner of the managed system policy.
description	out	string	The description of the managed system policy.
type	out	string	The type of the managed system policy. H is push, L is pull, M is vault/manual.

## 3.7.93 ManagedSystemPolicyGet (*Bravura Privilege*)

Retrieves the managed system policy with given ID.

### Form of Request

### Form of Response

## 3.7.93.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system policy.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemPolicyGet_vectorOutput

Direction	Size	Description
out	string	The ID of the managed system policy.
out	string	The description of the managed system policy.
out	string	The management type of the retrieved policy. H means push, L means pull, M means vault.
	out	out string out string

## 3.7.94 ManagedSystemPolicyList (Bravura Privilege)

Gets all managed system policies attached to a given managed system ID.

ManagedSystemPolicyList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

### 3.7.94.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system.
		oug	The ID or the managed eyelem
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ManagedSystemPolicyList_vectorOutput
id	out	string	The ID of the managed system policy.
description	out	string	The description of the managed system policy.
primary	out	int	Whether this policy is the primary policy for the given workstation. 1 is primary, 0 is not.
type	out	string	The management type of the retrieved policy. H means push, L means pull, M means vault.

# 3.7.95 ManagedSystemRestore (*Bravura Privilege*)

Removes the deleted flag from a managed system. This restores it to an actively managed system.

# Form of Request

## Form of Response

## **3.7.95.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system to restore.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.96 MobilePushNotification (*Bravura Security Fabric*)

Send push notification to mobile devices. Multiple profiles may be specified as recipients.

#### Form of Request

#### Form of Response

#### 3.7.96.1 Parameters

Parameter	Direction	Size	Description
syncmode	in	int	Whether to prefer synchronous push notifications. 1 is true, 0 is false.
title	in	string	Title of the notification.
body	in	string	Message body of the notification.
badge	in	string	Badge to display with the notification.
sound	in	string	Sound to play for the notification.

Parameter	Direction	Size	Description
urgent	in	int	Whether to send an urgent message. 1 is true, 0 is false (It is ignored when sending APNs).
ttlsecs	in	int	The total time to live of the message, in seconds.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of userids_vectorInput
userid	in	string	A profile to send notifications to.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.97 OTPAPIUserCreate (*Bravura Security Fabric*)

Creates an OTP API caller.

## Form of Request

#### Form of Response

#### **3.7.97.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the new OTP API caller.
name	in	string	The name of the new OTP API caller.
password	in	string	The OTP API caller's initial password.
passwordexpires	in	int	Whether the new OTP API caller's password can expire. 0 is never expire, 1 is can expire
cidr	in	string	The CIDR bitmask describing the block of IP addresses that will be permitted to log in as this OTP API caller. Leave blank to set to the default "127.0.0.1/32"
intervalhours	in	int	The duration, in hours, for which this user's password should remain valid before being randomized on their next login. Set to 0 to randomize on every log in.

... parameters continued on next page

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Direction	Size	Description
in	string	The session handle from the previous API call.
out	string	A message describing the error or success resulting from the API call.
		nom the 7th Foats.
out	int	The return code from the API call.
out	string	The session handle for the next API call.
	in out out	in string out string out int

# 3.7.98 OTPAPIUserDelete (Bravura Security Fabric)

Deletes an OTP API caller.

## Form of Request

## Form of Response

## 3.7.98.1 Parameters

Parameter	Direction	Size	Description
id	in	string	The ID of the OTP API caller to delete.
sessdat	in	atrina	The appaign handle from the province ADI call
sessual	III	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.99 OnboardManagedSystem (Bravura Privilege)

Onboards a managed system.

Requires the "Manage orphan managed systems" administrator ACL.

### Form of Request

#### Form of Response

## 3.7.99.1 Parameters

Parameter	Direction	Size	Description
systemid	in	string	The ID of the managed system to onboard.
description	in	string	The description of the retrieved workstation.
address	in	string	The network address of the target system.
comptype	in	string	Type of the computer. Can be W (Workstation), S
oemptypo		ounig	(Server), or empty (defaults to Workstation).
templatetargetid	in	string	The ID of a template target system.
policyid	in	string	The ID of the managed system policy.
			parameters continued on next page

Parameter	Direction	Size	Description
, , , , , , , , , , , , , , , , , , , ,			
connectionloginia	' in	string	The connecton login account ID.
connectionpassw	ori <b>d</b>	string	The connecton login account password.
proxy	in	string	List of proxies to use for the target system, if any.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.100 OrgManagerList (Bravura Security Fabric)

Retrieves a list of managers for the organization.

OrgManagerList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

## Form of Response

### **3.7.100.1 Parameters**

Parameter	Direction	Size	Description
clevel	in	int	The cLevel of the to-be listed managers. If -1, managers from all cLevels will be listed.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of OrgManagerList_vectorOutput
id	out	string	User ID.
mlevel	out	int	Manually-entered level.
clevel	out	int	Calculated level.
reportto	out	string	Higher ranked user to whom the user reports.

# 3.7.101 OrgReportsTo (Bravura Security Fabric)

Tests whether a given user directly or indirectly reports to another user.

#### Form of Request

## Form of Response

## **3.7.101.1 Parameters**

Parameter	Direction	Size	Description
managerid	in	string	The profile ID of the proposed manager.
· ·		Ü	
subordinateid	in	string	The profile ID of the proposed subordinate.
directonly	in	int	If non-zero, the condition is successful if and only if the manager is a direct manager. If zero, the condition is successful if the manager is a direct manager or manager though the management chain.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next page

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of OrgReportsTo_vectorOutput
reportsto	out	int	Non-zero for true condition, zero for false condition.

# 3.7.102 OrgUserGet (Bravura Security Fabric)

Retrieves the OrgChart attributes for a user.

#### Form of Request

### Form of Response

## **3.7.102.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The profile ID of the user whose OrgChart attributes will be retrieved.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
			parameters continued on next pag

Parameter	Direction	Size	Description
output	out	array	An array of OrgUserGet_vectorOutput
id	out	string	User ID.
mlevel	out	int	Manually-entered level.
clevel	out	int	Calculated level.
reportto	out	string	Higher ranked user to whom the user reports.
ismanager	out	int	Is a manager.

## 3.7.103 OrgUserManagersGet (Bravura Security Fabric)

Retrieves a list of managers (direct and optionally indirect) for a user.

OrgUserManagersGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

## **3.7.103.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The profile ID of the user whose managers will be retrieved.
directonly	in	int	If non-zero, only the manager who is a direct manager of the user will be retrieved. If zero, both the direct manager and all the managers above him or her in the management chain will be retrieved.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of OrgUserManagersGet_vectorOutput
id	out	string	User ID.
mlevel	out	int	Manually-entered level.
clevel	out	int	Calculated level.
reportto	out	string	Higher ranked user to whom the user reports.
ismanager	out	int	Is a manager.

# 3.7.104 OrgUserSubordinatesGet (*Bravura Security Fabric*)

Retrieves a list of subordinates for a manager.

OrgUserSubordinatesGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

## **3.7.104.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The profile ID of the manager whose subordinates are to be retrieved.
directonly	in	int	If non-zero, only the direct subordinates of the manager will be retrieved. If zero, both the direct subordinates and all the subordinates below them in the management chain will be retrieved.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of OrgUserSubordinatesGet_vectorOutput
id	out	string	User ID.
mlevel	out	int	Manually-entered level.
clevel	out	int	Calculated level.
reportto	out	string	Higher ranked user to whom the user reports.
ismanager	out	int	Is a manager.

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## 3.7.105 PAMBatchResultsList (*Bravura Privilege*)

Retrieves details for a randomization batch.

PAMBatchResultsList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

```
<PAMBatchResultsListRequest>
    <handle>...</handle>
    <workid>...</workid>
    <sessdat>...</sessdat>
</PAMBatchResultsListRequest>
```

## Form of Response

```
<PAMBatchResultsListResponse>
   <errmsq>...</errmsq>
   <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</PAMBatchResultsListResponse>
<PAMBatchResultsList_vectorOutput>
    <systemid>...</systemid>
    <longid>...
    <policyid>...</policyid>
    <status>...</status>
    <message>...</message>
</PAMBatchResultsList_vectorOutput>
```

#### 3.7.105.1 Parameters

Parameter	Direction	Size	Description
workid	in	string	The unique identifier for this batch.
Wernia		oung	The dringue identified for the Satori.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PAMBatchResultsList_vectorOutput
systemid	out	string	The managed system the account exists on.
longid	out	string	The managed account's long ID.
policyid	out	string	The policy under which this randomization occurred.
status	out	string	The result of randomizing this account. S means success, E means error, W means warning, N means none.
message	out	string	Informational message.

## 3.7.106 PSLStoreGet (*Bravura Security Fabric*)

Retrieves all values associated with the specified key(s) in persistent storage.

PSLStoreGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

## **3.7.106.1 Parameters**

Parameter	Direction	Size	Description
nameSpace	in	string	The namespace from which to retrieve values for the specified key(s).

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of keys_vectorInput
key	in	string	The key(s) of the values to be retrieved. At least one key must be specified.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PSLStoreGet_vectorOutput
key	out	string	The key of the retrieved value.
value	out	string	Value associated with the specified key.

# 3.7.107 PSLStoreGetKeys (*Bravura Security Fabric*)

Retrieves all keys belonging to the specified namespace in persistent storage.

PSLStoreGetKeys streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

## Form of Response

## **3.7.107.1 Parameters**

Parameter	Direction	Size	Description
nameSpace	in	string	The namespace from which to retrieve keys.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PSLStoreGetKeys_vectorOutput
key	out	string	The name of the retrieved key.

# 3.7.108 PSLStoreNamespacesGet (*Bravura Security Fabric*)

Returns existing namespaces in persistent storage.

PSLStoreNamespacesGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.108.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PSLStoreNamespacesGet_vectorOutput
nameSpace	out	string	A namespace.

## 3.7.109 PSLStoreRemove (*Bravura Security Fabric*)

Deletes specific value(s) associated with a specified key in persistent storage.

## Form of Request

#### Form of Response

#### **3.7.109.1 Parameters**

Parameter	Direction	Size	Description
nameSpace	in	string	The namespace in which to delete the key/value pairs.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of items_vectorInput
key	in	string	The key of the value to be deleted.
value	in	string	The value to delete.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.110 PSLStoreSet (Bravura Security Fabric)

Sets a value(s) in persistent storage. Any existing values for the key are removed.

### Form of Request

#### Form of Response

#### **3.7.110.1 Parameters**

Parameter	Direction	Size	Description
nameSpace	in	string	The namespace in which to set the key and value.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of items_vectorInput
·			
key	in	string	The key with which to store the value.
value	in	string	The value to store.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
rc	out	int	The return code from the API call.
			parameters continued on payt page

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.
		· ·	

## 3.7.111 PasswordRandomGet (*Bravura Security Fabric*)

Obtains randomly generated passwords that pass all of the *Hitachi ID Bravura Security Fabric* password rules. No more than 100 passwords will be generated in a single call. The generated number of passwords may not meet the required number. The actual number of generated passwords will be in the output's numGenerated field. When this happens, errmsg will contain a warning indicating how many passwords are generated.

### Form of Request

#### Form of Response

#### **3.7.111.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	A profile ID.
numToGenerate	in	int	The number of passwords to generate. No more than 100 passwords will be generated at once, even if this parameter is larger than 100.
targetid	in	string	The ID of a target system to generate passwords for. If nothing is specified, the default policy will be used.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PasswordRandomGet_vectorOutput
numGenerated	out	int	The number of generated passwords returned.
password	out	string	A Hitachi ID Bravura Security Fabric-generated random password.

## 3.7.112 PasswordRulesGet (*Bravura Security Fabric*)

Get the password rules for a specific target. The API caller needs the "change passwords" ACL to be able to run this function properly.

PasswordRulesGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.112.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID identifying the target system to get password rules for.
accountid	in	string	The account ID on the above target system (used to retrieve userclass selected password policy).

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PasswordRulesGet_vectorOutput
tag	out	string	Identifier for the strength rule.
status	out	string	The strength rule status. Possible values are 'DIS' (disabled), 'WARN' (produce a warning if rule is broken), and 'REQ' (fail strength check if rule is broken).
value	out	string	The strength rule value.
longvalue	out	string	The strength rule longvalue.

## 3.7.113 PasswordStrengthCheck (*Bravura Security Fabric*)

Test a supplied password against strength rules. This API method is used by the interceptor during transparent synchronization and will delegate the strength check to IDPM. Consider using PasswordStrengthTest API method in all other cases. The API caller needs the "change passwords" ACL to be able to run this function properly. This API requires IDPM to be installed.

## Form of Request

#### Form of Response

#### **3.7.113.1 Parameters**

Direction	Size	Description
in	string	The password to be tested.
in	string	The account's longid to test the password.
	-	- · · · · · · · · · · · · · · · · · · ·
in	string	The target ID associated with the new password.
in	string	The session handle from the previous API call.
out	string	A message describing the error or success resulting from the API call.
	in in in	in string in string in string in string

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	otrina	The session handle for the next API call.
sessual	out	string	The session handle for the flext AFT call.
output	out	array	An array of PasswordStrengthCheck_vectorOutput
strengthresult	out	int	The password strength result. A value of 0 indicates success, failure otherwise.
retmsg	out	string	The detailed returned message from the idpm service.
			361 VICE.

# 3.7.114 PasswordStrengthMessageGet (*Bravura Security Fabric*)

Get the password strength message for a specific target. The API caller needs the "change passwords" ACL to be able to run this function properly.

### Form of Request

## Form of Response

## **3.7.114.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID identifying the target system to get password rules for.
longid	in	string	The account ID on the above target system (used to retrieve userclass selected password policy).
type	in	int	The message type: $0-HTML$ , $1-formatted text$ , $2-for password transparent synchronization trigger.$
language	in	string	The skin language to be used to create the password strength message. If it is omitted, the default 'en-us' will be used.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PasswordStrengthMessageGet_vectorOutput
message	out	string	The password strength message.

## 3.7.115 PasswordStrengthTest (*Bravura Security Fabric*)

Evaluate a password strength against a password policy. This API method does not delegate to IDPM and does not need IDPM to be installed.

The password policy is given by a Password Policy ID. This can be given to the API method in two ways: 1) Directly specified (in the passwordpolicyid input field). 2) Through a Target System ID (in the targetid input field). The password policy id is then inferred from this targetid. The password policy will be the password policy of the Target System Group that the target system (with targetid) belongs to.

The longid and profileid input parameters are optional and only allowed when having specified a Target System ID.

When only specifying the Target System ID, the given password can only be validated against non-user specific policy rules. Non user specific rules are those rules that are not related to checking the password against a user's user name and user id. To still check these user name rules, an account id (longid) must be specified, in addition to the Target System ID.

In case an account does not exist yet - and there is no longid - a Profile ID may still be specified as input parameter.

The API caller needs the "change passwords" ACL to be able to run this function properly.

#### Form of Request

#### Form of Response

#### 3.7.115.1 Parameters

Parameter	Direction	Size	Description
password	in	string	The password to be tested.
passwordpolicyid	in	string	The password policy id to test the password against.
targetid	in	string	The target from which the password policy id should be read.
longid	in	string	Optional with targetid. The account's longid to test the password.
profileid	in	string	Optional. Only valid when testing for idType of Target ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PasswordStrengthTest_vectorOutput
strengthresult	out	int	The password strength result. A value of 0 indicates success, failure otherwise.
retmsg	out	string	Success message if the password check succeeds. In any other case, an empty text.

## 3.7.116 PolicyAuthorizerList (Bravura Privilege)

Retrieves all authorizers for a given managed system policy. If both recipient and requester are specified, will simulate a request and enumerate authorizers based on user classes. If neither recipient nor requester is specified, only statically-defined authorizers will be enumerated.

PolicyAuthorizerList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.116.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system policy.
recipient	in	string	Optional. The recipient of the potential request.
requester	in	string	Optional. The requester of the potential request.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PolicyAuthorizerList_vectorOutput
id	out	string	The ID of the retrieved authorizer.
name	out	string	The name of the authorizer.
type	out	string	The type of authorization provided by this authorizer.
phase	out	int	The phase this authorizer belongs to.

## 3.7.117 PolicyManagedAccountAdd (*Bravura Privilege*)

Manages an account with a managed system policy. Requires the "Modify properties for this policy" ACL

## Form of Request

## Form of Response

## **3.7.117.1 Parameters**

Parameter	Direction	Size	Description
policyid	in	string	The ID of the managed system policy.
systemid	in	string	The ID of the managed system.
accountid	in	string	The ID of the account.
setInitialPasswo	<i>ord</i> in	int	(deprecated) If nonzero, populate an initial empty password entry for the managed account. This will occur only if there is no existing password known for the managed account.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.118 PolicyManagedAccountDelete (*Bravura Privilege*)

Deletes an account on a managed system from a managed system policy. Returns API\_SUCCESS if an accountid that isn't managed by the policy is given. Requires the "Modify properties for this policy" ACL.

## Form of Request

## Form of Response

## **3.7.118.1 Parameters**

Parameter	Direction	Size	Description
policyid	in	string	The ID of the policy to delete the managed acocunt from.
systemid	in	string	The ID of the managed system to remove the account from.
accountid	in	string	The ID of the account to remove.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.119 PolicyManagedAccountList (Bravura Privilege)

Retrieves all accounts managed by a given managed system policy.

PolicyManagedAccountList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.119.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system policy.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PolicyManagedAccountList_vectorOutput
id	out	string	The ID of the retrieved managed account.
wstnid	out	string	The workstation ID the account is associated with.
validPassword	out	int	Whether the instance has a valid password for this account on this system.

# 3.7.120 PolicyManagedGroupSetList (*Bravura Security Fabric*)

Returns a list of group sets belonging to a given managed system policy.

PolicyManagedGroupSetList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.120.1 Parameters**

Parameter	Direction	Size	Description
roccurocid	:	atria a	The ID of the managed system policy
resourceid	in	string	The ID of the managed system policy.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PolicyManagedGroupSetList_vectorOutput
gsetid	out	string	The ID of the group set.
description	out	string	The description of the group set.

## 3.7.121 PolicyManagedGroupSetMembersList (*Bravura Privilege*)

Lists members of a group set.

If the systemid input is not empty, evaluates rules against groups on the specified system. Will return duplicates if explicitly configured groups also match rules.

PolicyManagedGroupSetMembersList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.121.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the managed system policy.
gsetid	in	string	The ID of the group set.

Parameter	Direction	Size	Description
systemid	in	string	(Optional) The ID of the managed system. If specified, evaluates rule-based members.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PolicyManagedGroupSetMembersList_vectorOutput
groupid	out	string	The ID of the group.
description	out	string	The description of the group.
sid	out	string	The SID for the group, if available.
isexplicit	out	int	Whether the group was added to the set explicitly or through rule evaluation. 1 means explicit, 0 means via rules.

# 3.7.122 PolicyManagedGroupSetTargetList (*Bravura Privilege*)

Returns a list of configured targets for a given group set.

PolicyManagedGroupSetTargetList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.122.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the managed system policy.
gsetid	in	string	The ID of the group set on the policy.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on payt page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PolicyManagedGroupSetTargetList_vectorOutput
targetid	out	string	The ID of the target.

# 3.7.123 PolicyManagingNodeSet (*Bravura Privilege*)

Changes the managing node for a managed system policy.

## Form of Request

## Form of Response

#### **3.7.123.1 Parameters**

Parameter	Direction	Size	Description
policyid	in	string	The ID of the managed system policy.
serverid	in	string	The new managing node's GUID. If this parameter is empty, the policy's managing node will be unassigned.
force	in	int	Under normal conditions, managed system policy ownership handoff is cooperative: a safe handoff requires the current managing node to voluntarily relinquish ownership. If the current managing node is down or otherwise unable to participate, the new managing node can be forced. This can cause desynchronization between nodes if misused. Only set this parameter to 1 if you are certain the current managing node is down.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.124 PolicyMemberSystemAdd (*Bravura Privilege*)

Attaches a managed system to a managed system policy.

## Form of Request

## Form of Response

## **3.7.124.1 Parameters**

Parameter	Direction	Size	Description
policyid	in	string	The ID of the policy to attach the managed system to.
systemid	in	string	The ID of the managed system to attach to the policy.
sessdat	in	string	The session handle from the previous API call.
		string	A message describing the error or success resulting
errmsg	out	String	from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.125 PolicyMemberSystemDelete (*Bravura Privilege*)

Removes a managed system from a managed system policy. Respects the RES MEMBER SYSTEMS DELETE MODE system variable.

## Form of Request

## Form of Response

#### **3.7.125.1 Parameters**

Parameter	Direction	Size	Description
policyid	in	string	The ID of the policy to detach the managed system from.
systemid	in	string	The ID of the managed system to detach from the policy.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.126 PolicyMemberSystemList (*Bravura Privilege*)

Retrieves all member systems associated with a given managed system policy.

PolicyMemberSystemList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.126.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The ID of the managed system policy.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PolicyMemberSystemList_vectorOutput
id	out	string	The ID of the retrieved workstation.
description	out	string	The description of the retrieved workstation.
type	out	string	The management type of the retrieved workstation. H means push, L means pull, M means vault.

## 3.7.127 PreDefinedRequestList (*Bravura Identity*)

Return a list of pre-defined request by enable status and/or intended recipients

PreDefinedRequestList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

```
<PreDefinedRequestListResponse>
    <errmsg>...
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</PreDefinedRequestListResponse>
<PreDefinedRequestList_vectorOutput>
    qid>...</preqid>
    <desc>...</desc>
    <url>...</url>
    <created>...</created>
    <enabled>...</enabled>
    <type>...</type>
    <deprecated>...</deprecated>
    <deprecatedreason>...</deprecatedreason>
</PreDefinedRequestList_vectorOutput>
```

#### **3.7.127.1 Parameters**

Parameter	Direction	Size	Description
enabled	in	int	Enabled (1 for enabled pre-defined requests, 0 for disabled pre-defined requests, -1 for both)

Parameter	Direction	Size	Description
reciptype	in	string	Intended recipient type ('A' for all users, 'E' for existing users, and 'N' for new users). Default to all recipient types.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PreDefinedRequestList_vectorOutput
preqid	out	string	Pre-defined request ID
desc	out	string	Pre-defined request description
url	out	string	URL link that describes the pre-defined request.
created	out	string	Created on date
enabled	out	int	Whether the pre-defined request is enabled for use.
type	out	string	Target audience for this pre-defined request
deprecated	out	string	Deprecated date
deprecatedreas	son out	string	Deprecated reason

## 3.7.128 PreRequestMemberAdd (Bravura Privilege)

Adds a resource to the given pre-defined request.

#### Form of Request

#### Form of Response

## **3.7.128.1 Parameters**

Parameter	Direction	Size	Description
preqid	in	string	The ID of the pre-defined request.
sessdat	in	string	The session handle from the previous API call.
		5g	
input	in	array	An array of resources_vectorInput
resid	in	string	The ID of the resource. For managed groups, this is either the GUID assigned to it from auto-discovery, or the ID of the target to which the group belongs. For resource type PROFILE, this is assumed to be !!!ALL

Parameter	Direction	Size	Description
restype	in	string	The type of the resource. Note that the type is one of the following: ROLE, TARG, TMPL, ATTRGRP, MGRP, PROFILE, and CUSTOM.
opertype	in	string	The type of operation. If restype is TARG, then opertype can be UPDT (Update account) (default), ENAU (Enable account), DNAU (Disable account), DELU (Delete account), MVCU (Move account from one context to another), or GRUD (Remove a user from a group). If restype is TMPL, then opertype is ACUA (Add account to user) (default). If restype is MGRP, then opertype can be GRUA (Add a user to a group) (default) or GRUD. If restype is ROLE, then opertype can be RLUA (Add role to user) (default) or DELR (Delete role). If restype is PROFILE, then opertype can be ENAP (enable profile) or DNAP (disable profile). If restype is CUSTOM, then opertype is CUSTOM1. Ignored for attribute groups.
required	in	int	If 1, the resource operation is required. Otherwise, the resource operation is optional. If restype is MGRP and opertype is GRUD, then required is 1 by default. If restype is ROLE and opertype is DELR, then required is 1 by default. Ignored for attribute groups.
groupid	in	string	The group ID, for managed group members, if resid is the target ID.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.129 PreRequestMemberDelete (Bravura Privilege)

Deletes a resource from the given pre-defined request.

## Form of Request

## Form of Response

#### **3.7.129.1 Parameters**

Parameter	Direction	Size	Description
preqid	in	string	The ID of the pre-defined request.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of resources_vectorInput
resid	in	string	The ID of the resource member. For managed groups, this is either the GUID assigned to it from auto-discovery, or the ID of the target to which the group belongs. For resource type PROFILE, this is assumed to be !!!ALL

Parameter	Direction	Size	Description
restype	in	string	The type of the resource member. Note that the type is one of the following: ROLE, TARG, TMPL, ATTRGRP, MGRP, PROFILE, CUSTOM.
opertype	in	string	The type of operation. If restype is TARG, then opertype can be UPDT (Update account) (default), ENAU (Enable account), DNAU (Disable account), DELU (Delete account), MVCU (Move account from one context to another), or GRUD (Remove a user from a group). If restype is TMPL, then opertype is ACUA (Add account to user) (default). If restype is MGRP, then opertype can be GRUA (Add a user to a group) (default) or GRUD. If restype is ROLE, then opertype can be RLUA (Add role to user) (default) or DELR (Delete role). If restype is PROFILE, then opertype can be ENAP (enable profile) or DNAP (disable profile). If restype is CUSTOM, the opertype is CUSTOM1.
groupid	in	string	The group ID, for managed group members, if resid is the target ID.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.130 PreRequestMemberGet (*Bravura Identity*)

This function obtains the predefined request information. Note: Some of the variable names and resource type values returned by this function have changed with version 8.3 of this product. Programs which were written to use earlier versions of this function may need to be updated for these changes.

PreRequestMemberGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.130.1 Parameters**

Parameter	Direction	Size	Description
preqid	in	string	The predefine request id.
required	in	int	Returns all members if the value is -1. Returns only required members if the value is 1. Returns only optional members if the value is 0.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of PreRequestMemberGet_vectorOutput
resid	out	string	(formerly memberid) The member resource's identifier.
groupid	out	string	The group ID, for managed group members.
restype	out	string	(formerly membertype) The member resource's type.
			Note that the type is one of the following: ROLE, TARG (formerly TARGET), ATTRGRP (formerly ATTRGROUP), TMPL (formerly TEMPLATE), MGRP (formerly MANAGEDGROUP), PROFILE, or CUSTOM.
opertype	out	string	The member resource's operation type.
required	out	int	If 1, the member is required. If zero, the member is optional.

# 3.7.131 QSetQuestionsGet (*Bravura Security Fabric*)

Get questions from a pre-defined question set.

QSetQuestionsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.131.1 Parameters**

Parameter	Direction	Size	Description
qsid	in	string	The question set ID to return questions from.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of QSetQuestionsGet_vectorOutput
qid	out	string	The ID used to identify the question.
question	out	string	The question text.

## 3.7.132 RecoverKeyByAccount (Bravura Privilege)

Tries to fetch the password of an account on a specified system that is no longer managed by *Hitachi ID Bravura Privilege*. This password is the last known value prior to the system becoming unmanaged and may have been changed locally since. Note that the caller must have the OTP IDAPI Caller privilege, as well as the Recover Last Managed Password ACL, in order to use this function.

#### Form of Request

#### Form of Response

#### **3.7.132.1 Parameters**

Parameter	Direction	Size	Description
systemid	in	string	The unmanaged system ID where the managed account ID is hosted.
accountid	in	string	The long ID of the managed account in the resource
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RecoverKeyByAccount_vectorOutput
password	out	string	The last known password of the account ID on the given system.
laststoredtime	out	string	The ISO-formatted UTC time this password was added to history table.

# 3.7.133 RegSysvarSet (*Bravura Security Fabric*)

Set system variable located in registry of instance.

## Form of Request

## Form of Response

## **3.7.133.1 Parameters**

Direction	Size	Description
in	string	Name of system variable.
in	string	Value to assign to system variable. To disable or delete a system variable, use an empty string.
in	string	The session handle from the previous API call.
out	string	A message describing the error or success resulting from the API call.
out	int	The return code from the API call.
out	string	The session handle for the next API call.
	in in out	in string in string in string out string out int

# 3.7.134 ReserveAccountId (Bravura Security Fabric)

#### Reserves account ID.

## Form of Request

## Form of Response

## **3.7.134.1 Parameters**

Parameter	Direction	Size	Description
resid	in	string	A pre-existing reservation ID with which to associate the reservations in this request. If this is empty, a new reservation ID will be created. If you want to create a reservation that consists of multiple types of reservable items, call this once with an empty ID and then re-use the returned resid upon subsequent calls. This will facilitate revoking the reservation.
accountid	in	string	An account ID.
targetid	in	string	(Optional) A target ID.
iscasesensitive	in	int	1 for case sensitive, otherwise case insensitive.
			parameters continued on next page

Parameter	Direction	Size	Description
permanent	in	int	1 for permanent, otherwise not permanent.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ReserveAccountId_vectorOutput
resid	out	string	The reservation ID.

## 3.7.135 ReserveAcctAttrValue (*Bravura Security Fabric*)

Reserves account attribute values.

#### Form of Request

## Form of Response

#### 3.7.135.1 Parameters

Parameter	Direction	Size	Description
resid	in	string	A pre-existing reservation ID with which to associate the reservations in this request. If this is empty, a new reservation ID will be created. If you want to create a reservation that consists of multiple types of reservable items, call this once with an empty ID and then re-use the returned resid upon subsequent calls. This will facilitate revoking the reservation.

Parameter	Direction	Size	Description
			A
name	in	string	An attribute key name.
targetid	in	string	A target ID.
iscasesensitive	in	int	1 for case sensitive, otherwise case insensitive.
permanent	in	int	1 for permanent, otherwise not permanent.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attribute_vectorInput
value	in	string	An attribute value.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ReserveAcctAttrValue_vectorOutput
resid	out	string	The reservation ID.

## 3.7.136 ReserveAttrValue (Bravura Security Fabric)

Reserves attribute values.

#### Form of Request

#### Form of Response

#### **3.7.136.1 Parameters**

Parameter	Direction	Size	Description
resid	in	string	A pre-existing reservation ID with which to associate the reservations in this request. If this is empty, a new reservation ID will be created. If you want to create a reservation that consists of multiple types of reservable items, call this once with an empty ID and then re-use the returned resid upon subsequent calls. This will facilitate revoking the reservation.

Parameter	Direction	Size	Description
name	in	string	An attribute key name.
restype	in	string	For attributes only, the type of resource to associate the attribute with: PROF = Profile attribute (default), MGRP = Managed groups, ROLE = Roles, TSYS = Target systems, TMPL = Template accounts, SODR = Segregation of duties rules, MSYS = Managed systems, MACC = Managed accounts, GRPAM = Group account memberships, GRPGM = Group group memberships
iscasesensitive	in	int	1 for case sensitive, otherwise case insensitive.
permanent	in	int	1 for permanent, otherwise not permanent.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of values_vectorInput
value	in	string	An attribute value.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ReserveAttrValue_vectorOutput
resid	out	string	The reservation ID.

## 3.7.137 ReserveCheck (*Bravura Security Fabric*)

Checks current usage and the reservation list for one of profile ID, account ID, and attribute values. If ERR\_COULD\_NOT\_RESERVE is returned, then the error message will contain either the reservation under which the ID was reserved, or "IN USE" if the ID is already being used.

#### Form of Request

#### Form of Response

## **3.7.137.1 Parameters**

Parameter	Direction	Size	Description
key	in	string	The attribute key name.
restype	in	string	For attributes only, the type of resource to associate the attribute with: PROF = Profile attribute (default), MGRP = Managed groups, ROLE = Roles, TSYS = Target systems, TMPL = Template accounts, SODR = Segregation of duties rules, MSYS = Managed systems, MACC = Managed accounts, GRPAM = Group account memberships, GRPGM = Group group memberships

Parameter	Direction	Size	Description
flag	in	int	For PSLang IDAPI, there are 5 predefined flags, casesensitive, account, attribute, account attribute and profile, available with PSLANG_FLAG_DEF struct. The casesensitive flag could be used along with account, attribute and account attribute to indicate case-sensitive checking. Also, all users could select one of seven values for the flag:
			• 2 for account ID, case insensitive mode
			• 3 for account ID, case sensitive mode
			• 4 for attribute values, case insensitive mode
			• 5 for attribute values, case sensitive mode
			8 for profile ID
			<ul> <li>16 for account attribute values, case insensitive mode</li> </ul>
			<ul> <li>17 for account attribute values, case sensitive mode</li> </ul>
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of values_vectorInput
value	in	string	A value corresponding to either a profile ID, an account ID, or an attribute. If name is "PROFILEID" or "ACCOUNTID", only the first value specified will be used for the profile ID or account ID, respectively. If a target ID must be specified for the account ID value, then it should be provided as the second value. Account IDs are interpreted as short IDs.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.138 ReserveGet (Bravura Security Fabric)

Retrieve all identifiers grouped by the given reservation ID.

ReserveGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.138.1 Parameters**

Parameter	Direction	Size	Description
resid	in	string	A pre-existing reservation ID whose reservations are to be retrieved.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ReserveGet_vectorOutput
type	out	string	The reservation type. It could be Attribute, Account or Profile
target	out	string	The target used for account and account attribute case
key	out	string	The key part of the reservation. It could be attribute key for attribute.datatype, target id for Account type or profile id for Profile type
restype	out	string	For attributes only, the type of resource to associate the attribute with: PROF = Profile attribute (default), MGRP = Managed groups, ROLE = Roles, TSYS = Target systems, TMPL = Template accounts, SODR = Segregation of duties rules, MSYS = Managed systems, MACC = Managed accounts, GRPAM = Group account memberships, GRPGM = Group group memberships
value	out	string	The value part of the reservation. It could be attribute value for attribute.datatype, account id for Account type or empty string for Profile type
permanent	out	int	1 if the reservation should persist past any request

# 3.7.139 ReserveProfileId (Bravura Security Fabric)

## Reserves profile ID.

# Form of Request

## Form of Response

## 3.7.139.1 Parameters

Parameter	Direction	Size	Description
resid	in	string	A pre-existing reservation ID with which to associate the reservations in this request. If this is empty, a new reservation ID will be created. If you want to create a reservation that consists of multiple types of reservable items, call this once with an empty ID and then re-use the returned resid upon subsequent calls. This will facilitate revoking the reservation.
profileid	in	string	A profile ID.
permanent	in	int	1 for permanent, otherwise not permanent.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ReserveProfileId_vectorOutput
resid	out	string	The reservation ID.

## 3.7.140 ReserveRevoke (*Bravura Security Fabric*)

Revokes all identifiers grouped by the given reservation ID.

## Form of Request

## Form of Response

## **3.7.140.1 Parameters**

Parameter	Direction	Size	Description
resid	in	string	A pre-existing reservation ID whose reservations are to be revoked.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.141 ResourceAttrNamesList (Bravura Security Fabric)

Lists information about the attribute names used to configure a given resource type.

ResourceAttrNamesList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.141.1 Parameters**

Parameter	Direction	Size	Description
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList where readonly is zero.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceAttrNamesList_vectorOutput
name	out	string	The name of the attribute.
isrequired	out	int	Whether a value for the attribute is required to create the resource.
isrequiredread	out	int	Whether a value for the attribute is required to read the resource
description	out	string	The description of the attribute.

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## 3.7.142 ResourceAttrsDel (*Bravura Security Fabric*)

Deletes the attribute values associated with a given existing resource. If the attribute is defined but no values exist for it, then API\_NO\_MORE\_DATA is returned.

## Form of Request

#### Form of Response

## **3.7.142.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource. For managed groups, this is either the GUID returned by ResourceFind, or the target ID if used in conjunction with the resourceid2 parameter.
resourceid2	in	string	For managed groups, this is either the groupid or shortid. For managed accounts, this is the managed system ID. For other resource types this parameter is ignored.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attributes_vectorInput
name	in	string	The name of the attribute.
index	in	int	The zero-based index of the value of the attribute, if the attribute is a multi-value attribute. If -1 is used, all values of the attribute will be deleted. Must be 0 or -1 if it is a single-value attribute.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.143 ResourceAttrsGet (*Bravura Security Fabric*)

Retrieves the values of specified attributes of a given existing resource. If attribute names are not specified, the values of all attributes associated with the given resource are retrieved. When values of a multi-valued attribute are returned, they are broken up and returned as a series of attribute name/value pairs.

ResourceAttrsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.143.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource. For managed groups, this is either the GUID returned by ResourceFind, or the target ID if used in conjunction with the resourceid2 parameter.
resourceid2	in	string	For managed groups, this is either the groupid or shortid. For managed accounts, this is the managed system ID. For other resource types this parameter is ignored.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attributes_vectorInput
name	in	string	The name of the attribute.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceAttrsGet_vectorOutput
name	out	string	The name of the attribute.
value	out	string	The value of the attribute.

## 3.7.144 ResourceAttrsSet (Bravura Security Fabric)

Sets the attribute values associated with a given existing resource.

## Form of Request

## Form of Response

## **3.7.144.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource. For managed groups, this is either the GUID returned by ResourceFind, or the target ID if used in conjunction with the resourceid2 parameter.
resourceid2	in	string	For managed groups, this is either the groupid or shortid. For managed accounts, this is the managed system ID. For other resource types this parameter is ignored.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
			parameters continued on next page

Parameter	Direction	Size	Description
replace	in	int	If zero, values passed to the function for the attribute will be appended to the attribute. If non-zero, the values will replace those already assigned to the attribute.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of values_vectorInput
name	in	string	The name of the attribute.
value	in	string	The value of the attribute.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.145 ResourceAuthInfoDelete (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Delete the authorization info for a phase of a resource. Note that this will also delete any static authorizers and user classes configured for this phase.

## Form of Request

#### Form of Response

## **3.7.145.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
phase	in	int	Which phase the authorization info is for.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.146 ResourceAuthInfoList (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

List the authorization info for a resource.

ResourceAuthInfoList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.146.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceAuthInfoList_vectorOutput
phase	out	int	Which phase the authorization info is for.
minauth	out	int	Minimum number of authorizations required for the resource to be approved.
maxrej	out	int	Maximum number of denials before the resource is denied (0 means ignore denials, only count approvals).

# 3.7.147 ResourceAuthInfoSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Set the authorization info for a phase of a resource.

## Form of Request

## Form of Response

#### **3.7.147.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
phase	in	int	Which phase the authorization info is for.
minauth	in	int	Minimum number of authorizations required for the resource to be approved.
maxrej	in	int	Maximum number of denials before the resource is denied (0 means ignore denials, only count approvals).
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.148 ResourceAuthUserclassCriterialsSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Check whether the authorization user class criteria for all phases is set on the specified resource.

#### Form of Request

## Form of Response

## **3.7.148.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of ResourceAuthUserclassCriterialsSet_vectorOutput
isset	out	int	Whether the authorization criteria is set.

# 3.7.149 ResourceAuthorizerAdd (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Add a statically assigned authorizer to a resource.

#### Form of Request

#### Form of Response

#### 3.7.149.1 Parameters

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
userid	in	string	Add this authorizer.
phase	in	int	Add this authorizer for this phase (if phases are not enabled, use 1).
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.150 ResourceAuthorizerDelete (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Delete an authorizer statically assigned to a resource.

#### Form of Request

#### Form of Response

## 3.7.150.1 **Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
userid	in	string	Delete this authorizer.
phase	in	int	Remove the authorizer from this phase (if phases are not enabled, use 1).
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.151 ResourceAuthorizerList (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Lists the authorizers statically assigned to a resource.

ResourceAuthorizerList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.151.1 Parameters**

Parameter	Direction	Size	Description
			TI 10 (1)
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceAuthorizerList_vectorOutput
userid	out	string	The profile ID of the authorizer.
phase	out	int	The phase the authorizer will be assigned to (if phases are not enabled, use 1).

# 3.7.152 ResourceAuthorizersGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Get all the authorizers assigned to a resource.

ResourceAuthorizersGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## 3.7.152.1 Parameters

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource. For managed groups, this is either the GUID returned by ResourceFind, or the target ID if used in conjunction with the resourceid2 parameter.

Parameter	Direction	Size	Description
resourceid2	in	string	For managed groups, this is either the groupid or shortid.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
requester	in	string	The requester of the potential request, when batchsig is not provided, or else the information will be extracted from the request.
recipient	in	string	Recipient of the potential request, when batchsig is not provided, or else the information will be extracted from the request.
batchsig	in	string	The batch ID of the potential request.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceAuthorizersGet_vectorOutput
userid	out	string	The profile ID of the authorizer.
phase	out	int	The phase the authorizer will be assigned to (if phases are not enabled, use 1).

## 3.7.153 ResourceCancel (*Bravura Security Fabric*)

Cancels the creation of the given resource. The handle of the resource becomes invalid and can no longer be used in further function calls.

## Form of Request

## Form of Response

## **3.7.153.1 Parameters**

Parameter	Direction	Size	Description
reshandle	in	string	The handle of the resource, as returned by ResourceCreate.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.154 ResourceCreate (Bravura Security Fabric)

Initializes the process of creating a new resource. The resource itself is not created until ResourcePost is called.

## Form of Request

## Form of Response

#### **3.7.154.1 Parameters**

Parameter	Direction	Size	Description
restype	in	string	The type of resource to create. This must be one of the types returned by ResourceTypesList where readonly is zero.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceCreate_vectorOutput
			parameters continued on next page

Parameter	Direction	Size	Description
reshandle	out	string	A handle associated with this resource, to be used with further function calls for configuring and creating this resource.

## 3.7.155 ResourceCreateGet (*Bravura Security Fabric*)

Retrieves the parameters assigned to the given resource undergoing creation, as assigned by previous calls to ResourceCreateSet.

ResourceCreateGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

See Resource Configuration Parameters for the complete list of resource types and their parameters supported by this function.

#### Form of Request

#### Form of Response

#### 3.7.155.1 Parameters

Parameter	Direction	Size	Description
reshandle	in	string	The handle of the resource, as returned by ResourceCreate.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceCreateGet_vectorOutput
name	out	string	The name of the parameter.
value	out	string	The value of the parameter.

## 3.7.156 ResourceCreateSet (*Bravura Security Fabric*)

Assigns parameters to the given resource undergoing creation. If a value for a given parameter has already been assigned on a previous call to this function, the newer value replaces the older one.

See Resource Configuration Parameters for the complete list of resource types and their parameters supported by this function.

#### Form of Request

#### Form of Response

## 3.7.156.1 **Parameters**

Parameter	Direction	Size	Description
reshandle	in	string	The handle of the resource, as returned by ResourceCreate.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of parameters_vectorInput
name	in	string	The name of the parameter.
value	in	string	The value of the parameter.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.157 ResourceDelete (*Bravura Security Fabric*)

Delete the given resource. "resourceid" is optional to identify the resource to delete; if empty, the resource is located using parameters in the vector of input values.

## Form of Request

## Form of Response

#### 3.7.157.1 Parameters

Parameter	Direction	Size	Description
resourceid	in	string	The resource ID.
restype	in	string	The resource type. This must be one of the types returned by ResourceTypesList where readonly is zero.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of parameters_vectorInput
name	in	string	The name of the parameter.
value	in	string	The value of the parameter.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.158 ResourceDependenciesGet (*Bravura Privilege*)

Retrieves the dependencies of the given resource. Can be used before calling ResourceDelete, to determine if the resource has dependencies that would prevent it from being deleted. Note that the resource type of some dependencies may not be supported currently by the other resource functions.

ResourceDependenciesGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.158.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The resource ID.
restype	in	string	The resource type. This must be one of the types returned by ResourceTypesList where readonly is zero.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceDependenciesGet_vectorOutput
resourceid	out	string	The resource ID of the dependency.
restype	out	string	The resource type of the dependency.

## 3.7.159 ResourceFind (*Bravura Security Fabric*)

Finds one or more resources matching a given set of criteria.

ResourceFind streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

See Searching for resources with ResourceFind (p35) for details on using this function.

#### Form of Request

#### Form of Response

#### 3.7.159.1 Parameters

Parameter	Direction	Size	Description
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of criteria_vectorInput
name	in	string	The name of the search criterion. This must be one of the names returned by ResourceFindCriteria for the given resource type.
value	in	string	The value of the search attribute.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceFind_vectorOutput
resourceid	out	string	The ID of the resource.
resourceid2	out	string	The second part of the ID of the resource.

# 3.7.160 ResourceFindByAttr (*Bravura Security Fabric*)

Searches for resources only by attributes. All resource attribute.datatypes except the password type are supported. When search attributes are specified, the results of each match are ANDed together. A maximum of five search criteria is allowed (searching by range counts as two search criteria).

ResourceFindByAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.160.1 Parameters**

Parameter	Direction	Size	Description
restype	in	string	(Optional) The type of resource. This must be one of the types returned by ResourceTypesList. If restype is not specified, then all matching resource types will be returned.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of criteria_vectorInput
key	in	string	The attribute ID.
valmin	in	string	The value of the attribute. If valmax is used, then valmin is the minimum of a range of values for the search attribute.
valmax	in	string	The maximum of a range of values for the search attribute.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceFindByAttr_vectorOutput
resourceid	out	string	The ID of the resource.
restype	out	string	The type of resource. This is one of the types returned by ResourceTypesList.

# 3.7.161 ResourceFindCriteria (*Bravura Security Fabric*)

Lists the search criteria by which the given resource type can be found using ResourceFind.

ResourceFindCriteria streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

See ResourceFind Search Criteria for the complete list of search criteria returned by this function.

#### Form of Request

### Form of Response

#### **3.7.161.1 Parameters**

Parameter	Direction	Size	Description
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
			parameters continued on next page

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceFindCriteria_vectorOutput
name	out	string	The name of the search criterion.
description	out	string	The description of the search criterion.
type	out	string	The type of the search criterion.
isregexp	out	int	(deprecated) Whether the value of the search criterion can be a regular expression. 0 is false, anything else is true.

# 3.7.162 ResourceGet (*Bravura Security Fabric*)

Retrieves the parameters associated with the given existing resource.

ResourceGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.162.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource. For managed groups, this is either the GUID returned by ResourceFind, or the target ID if used in conjunction with the resourceid2 parameter. For account attributes, this is either the GUID returned by ResourceFind, or the account attribute ID if used in conjunction with resourceid2 parameter.

Parameter	Direction	Size	Description
resourceid2	in	string	For managed groups, this is either the groupid or shortid. For account attributes, this is either the platform ID or target ID. For other resource types this parameter is ignored.
resourceid3	in	string	For account attributes, this is the override level, 0 (no override), 1 (platform-level override), or 2 (target-level override). For other resource types this parameter is ignored.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceGet_vectorOutput
name	out	string	The name of the parameter.
value	out	string	The value of the parameter.

# 3.7.163 ResourceImplUserclassCriterialsSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Check whether the implementer user class criteria for all phases is set on the specified resource.

ResourceImplUserclassCriterialsSet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.163.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the
handle	in	string	call. Pass an empty string for the first of

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceImplUserclassCriterialsSet_vectorOutput
isset	out	int	Whether the authorization criteria is set.

# 3.7.164 ResourceImplementerAdd (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Add a statically assigned implementer to a resource.

#### Form of Request

#### Form of Response

#### **3.7.164.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
userid	in	string	Add this implementer.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.165 ResourceImplementerDelete (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Delete an implementer statically assigned to a resource.

#### Form of Request

#### Form of Response

#### 3.7.165.1 Parameters

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
userid	in	string	Delete this implementer.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.166 ResourceImplementerList (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Lists the implementers statically assigned to a resource.

ResourceImplementerList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

# **3.7.166.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceImplementerList_vectorOutput
userid	out	string	The profile ID of the implementer.

# 3.7.167 ResourceOperActionGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Returns the action of the given operation(s) of the given resource. If the operation isn't specified, then the actions of all operations of the given resource are returned.

ResourceOperActionGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.167.1 Parameters**

Parameter	Direction	Size	Description
resid	in	string	The ID of the resource.

Parameter	Direction	Size	Description
restype	in	string	The type of the resource. Note that the type is one of the following: TARG and TMPL.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of operations_vectorInput
opertype	in	string	The type of operation. If restype is TARG, then opertype can be ACUA (Create account), DELU (Delete account), DNAU (Disable account), ENAU (Enable account), MVCU (Move account from one context to another), RENU (Rename user), UPDT (Update account), GRUA (Add group membership), GRUD (Delete group membership), GROA (Add group owner), GROD (Delete group owner), GRGA (Add child group) or GRGD (Delete child group). If restype is TMPL, then opertype is ACUA (Create account).
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceOperActionGet_vectorOutput
opertype	out	string	The type of operation.
action	out	string	The type of action. Can be NONE (No override), AGENT (Connector operation), or IMPL (Implementation operation).

# 3.7.168 ResourceOperActionSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Sets the action of the given operation(s) of the given resource.

# Form of Request

### Form of Response

# **3.7.168.1 Parameters**

Parameter	Direction	Size	Description
resid	in	string	The ID of the resource.
restype	in	string	The type of the resource. Note that the type is one of the following: TARG and TMPL.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of actions_vectorInput

Parameter	Direction	Size	Description
opertype	in	string	The type of operation. If restype is TARG, then opertype can be ACUA (Create account), DELU (Delete account), DNAU (Disable account), ENAU (Enable account), MVCU (Move account from one context to another), RENU (Rename user), UPDT (Update account), GRUA (Add group membership), GRUD (Delete group membership), GROA (Add group owner), GROD (Delete group owner), GRGA (Add child group) or GRGD (Delete child group). If restype is TMPL, then opertype is ACUA (Create account).
action	in	string	The type of action. Can be NONE (No override), AGENT (Connector operation), or IMPL (Implementation operation).
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.169 ResourcePost (Bravura Security Fabric)

Posts the given resource and its configured attributes for use in *Hitachi ID Bravura Security Fabric*. Upon successful creation of the resource, the handle to the resource becomes invalid.

# Form of Request

# Form of Response

# **3.7.169.1 Parameters**

Parameter	Direction	Size	Description
reshandle	in	string	The handle of the resource, as returned by ResourceCreate.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.170 ResourceRead (*Bravura Security Fabric*)

Read out the values of a specified resource. Requires one or more key-value pairs to identify a single resource. The required keys are those returned by ResourceAttrNamesList where isrequiredread is true.

ResourceRead streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

#### Form of Response

# **3.7.170.1 Parameters**

Parameter	Direction	Size	Description
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList where readonly is zero.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of parameters_vectorInput
name	in	string	The name of the parameter.
value	in	string	The value of the parameter.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceRead_vectorOutput
name	out	string	The name of the parameter.
value	out	string	The value of the parameter.
type	out	string	How this parameter should be interpreted. Possible values are "string", "boolean" (1 or 0), "integer", and "kvg".

# 3.7.171 ResourceSet (*Bravura Security Fabric*)

Sets the parameters associated with the given existing resource. "resourceid" is optional to identify the resource to update; if empty, the resource is located using parameters in the vector of input values.

See Resource Configuration Parameters for the complete list of resource types and their parameters supported by this function.

#### Form of Request

#### Form of Response

#### **3.7.171.1 Parameters**

Parameter	Direction	Size	Description
resourceid	in	string	The ID of the resource.
restype	in	string	The type of resource. This must be one of the types returned by ResourceTypesList where readonly is zero.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of parameters_vectorInput

Parameter	Direction	Size	Description
name	in	string	The name of the parameter.
value	in	atria a	The value of the management
vaiue	in	string	The value of the parameter.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.172 ResourceTypesList (*Bravura Security Fabric*)

Lists supported resource types for use with ResourceAttrNamesList, ResourceCreate, ResourceFind, ResourceFindCriteria, ResourceGet, and ResourceSet.

ResourceTypesList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

# Form of Response

# **3.7.172.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next pa

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Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ResourceTypesList_vectorOutput
name	out	string	The name of the resource type.
description	out	string	The description of the resource type.
readonly	out	int	Zero if the resource type can be created with ResourceCreate and updated with ResourceSet.

# 3.7.173 RetrieveCheckoutPassword (*Bravura Privilege*)

Retrieve the password for an account (given wstn and account) currently checked out (given a check-out id).

RetrieveCheckoutPassword streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.173.1 Parameters**

Parameter	Direction	Size	Description	
checkoutid	in	string	Check-out ID.	
wstnid	in	string	The workstation ID of the account.	
accountname	in	string	The account ID.	

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RetrieveCheckoutPassword_vectorOutput
password	out	string	The password for this account, if the checkout was retrieved.
passwordstatus	out	string	The password status.
status	out	int	The status of this get password attempt.
errmsg	out	string	The error message for this get password attempt.

# 3.7.174 RoleAuthorizerAdd (*Bravura Identity*)

Adds the specified authorizer to the specified role's defintion.

# Form of Request

# Form of Response

#### **3.7.174.1 Parameters**

Parameter	Direction	Size	Description
phase	in	int	Phase in which the authorizer will be asked to respond (for single-phase authorization, specify 1).
roleid	in	string	The role's identifier.
authorizerid	in	string	The authorizer's identifier.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.175 RoleAuthorizerDelete (*Bravura Identity*)

Deletes the specified authorizer from the specified role's definition.

# Form of Request

# Form of Response

# **3.7.175.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The role's identifier.
authorizerid	in	string	The authorizer's identifier.
phase	in	int	The authorizer's phase (specify 1 if phases are not enabled).
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.176 RoleAuthorizerList (*Bravura Identity*)

Retrieves a list of all the authorizers assigned to the specified role. The returned list may be empty if there are no authorizers assigned to the role.

RoleAuthorizerList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

### **3.7.176.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The role's identifier.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleAuthorizerList_vectorOutput
phase	out	int	Phase in which the authorizer will be asked to respond.
authorizerid	out	string	The ID of the role's authorizer.
authorizername	out	string	The name of the role's authorizer.

# 3.7.177 RoleCreate (*Bravura Identity*)

Creates a new role without any member resources.

All role IDs will be converted to upper case.

RoleCreate will return one of the following:

- API\_SUCCESS: The new role has been successfully created based on the provided parameter values.
- ERR DESC MANDATORY: The role must have a non-empty description.
- ERR\_UNKNOWN: The operation encountered an unknown internal error. It is advisable to check the logs for both iddb.exe and idapi.exe to help determine the cause.
- ERR\_ROLE\_ALREADY\_EXISTS: The specified role identifier already exists.

#### Form of Request

#### Form of Response

# **3.7.177.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The unique identifier for the role to create.
description	in	string	The role's description. It must be non-empty or else the creation request will be denied with ERR_DESC_MANDATORY.

Parameter	Direction	Size	Description
isEnabled	in	int	Is the role enabled? (0) is not enabled, (1) is enabled.
isAssignable	in	int	Is the role assignable? (0) is not assignable, (1) is assignable.
isEnforced	in	int	Is the role enforced? (0) is not enforced, (1) is enforced.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.178 RoleDelete (Bravura Identity)

Deletes an existing role.

# Form of Request

# Form of Response

# 3.7.178.1 Parameters

Parameter	Direction	Size	Description
roleid	in	string	The role's identifier.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
rc	out	int	The return code from the API call.
70	out		The return code norm the 74 Feath.
sessdat	out	string	The session handle for the next API call.

# 3.7.179 RoleGetByResource (*Bravura Identity*)

Retrieves a list of all roles that have the given resource as a member resource.

RoleGetByResource streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

# Form of Request

#### Form of Response

# 3.7.179.1 Parameters

Parameter	Direction	Size	Description
membertype	in	string	The type of the member resource. This must be one of the following types: ROLE, TEMPLATE or MANAGEDGROUP.
memberid	in	string	The identifier of the member resource to query. If membertype is MANAGEDGROUP, then memberid is the ID of the target.

Parameter	Direction	Size	Description
groupid	in	string	The identifier of the managed group associated with the memberid. This parameter is only used when membertype is MANAGEDGROUP.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleGetByResource_vectorOutput
roleid	out	string	The role's identifier.

# 3.7.180 RoleGetByUser (Bravura Identity)

Retrieves a list of all roles that have the given user as a member.

RoleGetByUser streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

# Form of Request

# Form of Response

# **3.7.180.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The identifier of the user to query roles.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleGetByUser_vectorOutput
roleid	out	string	The role's identifier.

# 3.7.181 RoleList (*Bravura Identity*)

Gets a list of all roles.

RoleList will return one of the following:

- API\_SUCCESS: The operation was successfully executed. The vectorOutput can have 0 to n elements.
- ERR\_UNKNOWN: The operation encountered an unknown internal error. It is advisable to check the logs for both iddb.exe and idapi.exe to help determine the cause.
- ERR\_NO\_SUCH\_USER The specified user identifier does not exist. Verify that the spelling is correct.

RoleList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.181.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleList_vectorOutput
roleid	out	string	The role's identifier.

# 3.7.182 RoleRemovableCheck (Bravura Identity)

Check if a role can be removed, return success if role can be removed.

#### Form of Request

## Form of Response

#### **3.7.182.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The role's identifier.
disabledonly	in	int	Ensure role is disabled.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleRemovableCheck_vectorOutput
			parameters continued on next page

Parameter	Direction	Size	Description
status	out	int	Whether the role can be removed: 0: role can be removed 1: role does not exist 2: role is enabled 3: role has users assigned 4: role has dependents

## 3.7.183 RoleResourceAdd (*Bravura Identity*)

Adds the specified resource as member to the given role. Both the role and resource must exist before using this API call. It will not create a missing resource.

RoleResourceAdd will return one of the following:

- API SUCCESS: The specified resource member was successfully added to the role.
- ERR\_UNKNOWN: The operation encountered an unknown internal error. It is advisable to check the logs for both iddb.exe and idapi.exe to help determine the cause.
- ERR\_INVALID\_MEMBER\_TYPE: The specified member type is not supported. It must be one of the following: ROLE, TEMPLATE and MANAGEDGROUP.
- ERR\_NO\_SUCH\_TEMPLATE: The specified template account does not exist. Verify that it exists or its spelling.
- ERR\_NO\_SUCH\_GROUP: The specified group does not exist. Verify that it exists, that it is managed, its spelling or that it is a group on the specified target.
- ERR\_NO\_SUCH\_ROLE: Either the parent role (roleid) or the subrole (memberid) does not exist. Verify that the spelling is correct.
- ERR\_ROLE\_CYCLE: The specified subrole (memberid) is the same as the parent role (roleid).
- ERR\_RESOURCE\_EXISTS: The resource being added is already a member of the role.

#### Form of Request

#### Form of Response

#### **3.7.183.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The role's identifier.
membertype	in	string	The type of the member resource. This must be one of the following types: ROLE, TEMPLATE or MANAGEDGROUP.
memberid	in	string	The identifier of the existing member resource to add. If membertype is MANAGEDGROUP, then the memberid is the ID of the target.
groupid	in	string	The identifier of the managed group associated with the memberid. This parameter is only used when membertype is MANAGEDGROUP.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.184 RoleResourceDelete (*Bravura Identity*)

Deletes the specified member resource from the role's definition. Deletion will only occur if both the role and resource member exist. Does not remove the member resource.

### Form of Request

## Form of Response

## **3.7.184.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The role's identifier.
membertype	in	string	The type of the member resource. This must be one of the following types: ROLE, TEMPLATE or MANAGEDGROUP.
memberid	in	string	The identifier of the member resource to delete. If membertype is MANAGEDGROUP, then the memberid is the ID of the target.
groupid	in	string	The identifier of the managed group associated with the memberid. This parameter is only used when membertype is MANAGEDGROUP.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.185 RoleResourceList (*Bravura Identity*)

Retrieves a list of all member resources assigned to the specified role. The returned list may be empty if there are no resource members defined for the specified role.

RoleResourceList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### 3.7.185.1 **Parameters**

Parameter	Direction	Size	Description	
roleid	in	string	The role's identifier.	
required	in	int	Return Required resources.	
optional	in	int	Return optional resources.	

Parameter	Direction	Size	Description
legacy	in	int	Return legacy resources.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleResourceList_vectorOutput
memberid	out	string	The member resource's identifier. For managed group members, this is the target ID.
groupid	out	string	The group ID, for managed group members.
membertype	out	string	The member resource's type. This must be one of the following: ROLE, TEMPLATE or MANAGEDGROUP.
optional	out	int	Nonzero if the resource is optional in the role.

# 3.7.186 RoleUpdate (*Bravura Identity*)

Updates an existing role with the provided values.

RoleUpdate will return one of the following:

- API\_SUCCESS: The new role has been successfully created based on the provided parameter values.
- ERR\_DESC\_MANDATORY: The role must have a non-empty description.
- ERR\_UNKNOWN: The operation encountered an unknown internal error. It is advisable to check the logs for both iddb.exe and idapi.exe to help determine the cause.
- ERR\_NO\_SUCH\_ROLE: The specified role identifier does not exist. Verify that the spelling is correct.

#### Form of Request

#### Form of Response

## **3.7.186.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The identifier for the role to update.
description	in	string	The role's description. It must be non-empty or else the update request will be denied with ERR_DESC_MANDATORY.

Parameter	Direction	Size	Description
isEnabled	in	int	Is the role enabled? (0) is not enabled, (1) is enabled.
isAssignable	in	int	Is the role assignable? (0) is not assignable, (1) is assignable.
isEnforced	in	int	Is the role enforced? (0) is not enforced, (1) is enforced.
isDeprecated	in	int	Is the role deprecated? (0) is not deprecated, (1) is deprecated.
deprecatedReas	s <i>on</i> in	string	The reason for deprecating the role.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.187 RoleUserList (*Bravura Identity*)

Retrieves a list of all the users that are members of the specified role. The returned list may be empty if there are no user members for the role.

RoleUserList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.187.1 Parameters**

Parameter	Direction	Size	Description
roleid	in	string	The role ID.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RoleUserList_vectorOutput
userid	out	string	A role member user's identifier.
username	out	string	A role member user's name.

# 3.7.188 RunReport (*Bravura Security Fabric*)

Initiate and run a report and stream the results. Can save to or load from an existing report.

RunReport streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

## Form of Response

#### **3.7.188.1 Parameters**

Parameter	Direction	Size	Description
reporttype	in	string	The report to be run.
saveas	in	string	(Optional) If this value is not empty, run the report and save report with this value as the saved report name. This will overwrite any existing saved reports with the same name. This will not take effect if the "loadfrom" input option is specified.
loadfrom	in	string	(Optional) If this value is not empty, load data from the report with this name.
numresults	in	int	(Optional) Maximum number of results (records) to return through the API. If less than 1 or not specified, indicates all records to be returned.
returns	in	string	(Optional) ROW: Returns results one record at a time (default if undefined). CELL: Returns results one data value of a record at a time.
options	in	string	(Optional) A string of options to be run with the report. This needs to be given in a KVG structure where the key is the option to set.  Valid email options:  to: Comma-separated list of email addresses cc: Comma-separated list of email addresses bcc: Comma-separated list of email addresses attachmenttype: CSV (default if not indicated), HTM, or PDF subject: Email subject line message: Email body  Valid UNC options: filetype: CSV (default if not indicated), HTM, or PDF unc: UNC address filename: Filename to save as credtarget: Target system ID creduser: Administrator ID

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of criteria_vectorInput
searchfield	in	string	Input criteria name that maps to an input widget name.
searchvalue	in	string	Value to search against. This is set against the widget name chosen as the searchfield.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of RunReport_vectorOutput
metadata	out	string	The data returned the report with header information as follows: "reportid": ID of the report "headercount": Number of header values "header": Identifies that the value is a header title "recordcount": Number of records to return Each row will be an indexed list of records <record index="">: Index of current record value being returned</record>

Parameter	Direction	Size	Description
value	out	string	If "returns" input is set to CELL, this value contains individual data values.  Example: one If "returns" input is set to ROW, this value contains a comma-separated, quoted list of values representing one record.  Example: "one","two","three"

# 3.7.189 SavedSessionsList (Bravura Privilege)

List saved sessions.

SavedSessionsList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

```
<SavedSessionsListResponse>
   <errmsg>...</errmsg>
   <handle>...</handle>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...
</SavedSessionsListResponse>
<SavedSessionsList_vectorOutput>
   <id>...</id>
   cprofileguid>...
   <clonedescription>...</clonedescription>
   <categorydesc>...</categorydesc>
   <notes>...</notes>
   <resqrpid>...</resqrpid>
   <pluginctrlid>...</pluginctrlid>
   <wstntoken>...
   <accountguid>...</accountguid>
</SavedSessionsList_vectorOutput>
```

## 3.7.189.1 Parameters

Parameter	Direction	Size	Description
disclosureguid	in	string	Guid of the disclosure.
profileguid	in	string	Optional. If we want to get the saved sessions from this user.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of SavedSessionsList_vectorOutput
id	out	string	The identifier for the saved sesssion.
profileguid	out	string	The guid for the user's saved session.
clonedescription	out	string	The name of the saved session.
categorydesc	out	string	The category of the saved session.
notes	out	string	The notes of the saved session.
resgrpid	out	string	The MSP associated to the managed account's saved sesssion.
pluginctrlid	out	string	The disclosure guid associated to the saved session.
wstntoken	out	string	The workstation associated to the managed account's saved session.

Parameter	Direction	Size	Description
accountguid	out	string	The managed account associated to the saved session.

# 3.7.190 ScheduledTaskStatus (*Bravura Security Fabric*)

Provides information on scheduled tasks.

ScheduledTaskStatus streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

```
<ScheduledTaskStatusRequest>
    <handle>...</handle>
    <sessdat>...</sessdat>
</ScheduledTaskStatusRequest>
```

#### Form of Response

```
<ScheduledTaskStatusResponse>
   <errmsg>...</errmsg>
   <handle>...</handle>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...
</ScheduledTaskStatusResponse>
<ScheduledTaskStatus_vectorOutput>
   <taskid>...</taskid>
   <job>...</job>
   <enabled>...
   <serverid>...</serverid>
   <laststart>...
   <lastfinish>...
   <lasterror>...
   <laststatus>...
</ScheduledTaskStatus_vectorOutput>
```

## 3.7.190.1 Parameters

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of ScheduledTaskStatus_vectorOutput
taskid	out	string	Identifier for the scheduled task.
job	out	string	Command line and arguments to be executed.
enabled	out	int	"1" if the task is enabled, "0" if disabled.
serverid	out	string	Server ID that is configured to run this task. If empty, the task is run by all servers.
laststart	out	string	Latest date and time the task started. If empty, the task has never started.
lastfinish	out	string	Latest date and time the task finished. If empty, the task has never finished.
lasterror	out	int	Error code returned from the job when it last ran.
laststatus	out	string	Status of the latest task run. It can be one of the following: - RUNNING - FINISHED - FAILED - NOTRUN - LAUNCHED If empty, the status is unknown.

# 3.7.191 SessionDataCustomGet (*Bravura Security Fabric*)

Get the value from the custom session tag

SessionDataCustomGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

## Form of Response

## **3.7.191.1 Parameters**

Parameter	Direction	Size	Description
sessid	in	string	The session id
tag	in	string	The tag name
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of SessionDataCustomGet_vectorOutput
value	out	string	The tag value

# 3.7.192 SessionDataCustomSet (*Bravura Security Fabric*)

Set the value to the custom session tag

## Form of Request

## Form of Response

#### **3.7.192.1 Parameters**

Parameter	Direction	Size	Description
sessid	in	string	The session id
tag	in	string	The tag name
value	in	string	The tag value
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.193 SessionDataGet (Bravura Security Fabric)

Get the value from the session tag

SessionDataGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.193.1 Parameters**

Parameter	Direction	Size	Description
sessid	in	string	The session id
tag	in	string	The tag name
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			peremeters centinued on next perce

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of SessionDataGet_vectorOutput
value	out	string	The tag value

# 3.7.194 SessionDataGetFull (*Bravura Security Fabric*)

Get the full value from the session tag in chunks. Useful for large values

SessionDataGetFull streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.194.1 Parameters**

Parameter	Direction	Size	Description
sessid	in	string	The session id
tag	in	string	The tag name
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of SessionDataGetFull_vectorOutput
value	out	string	The tag value. Sent in consecutive chunks which need to be reassembled

# 3.7.195 SessionIsValid (*Bravura Security Fabric*)

Validates a session by checking the session data. If there is a problem with the given session data, the error code may be ERR\_SESSID\_EXPIRED, ERR\_SESSID\_BAD\_LICENSE, or ERR\_SESSID\_NOT\_FOUND.

### Form of Request

#### Form of Response

## 3.7.195.1 Parameters

Parameter	Direction	Size	Description
requesterid	in	string	The requester's profile ID.
isurlencoded	in	int	Whether sessdata has been URL-encoded. 0 is unencoded, anything else is encoded.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of sessdatas_vectorInput

Parameter	Direction	Size	Description
sessdata	in	string	The session data. If the value is larger than 16383 characters, then it should be broken up into smaller segments and passed to the function, which will reassemble the segments in the order that they were passed. This parameter cannot be used to evaluate multiple session data values.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.196 SubscriberList (Bravura Identity, Bravura Privilege, Access Certifier)

List subscribers and their associated accounts. All of the input parameters are optional. If no parameters are provided, all subscribers in all managed systems will be listed. This function deprecates ManagedAccountSubscriberList.

SubscriberList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

```
<SubscriberListResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</SubscriberListResponse>
<SubscriberList_vectorOutput>
    <id>...</id>
    <targetid>...</targetid>
    <targetdesc>...</targetdesc>
    <accountid>...</accountid>
    <subscribertype>...</subscribertype>
    <objectname>...</objectname>
    <objectsid>...</objectsid>
    <longid>...
    <hostid>...</hostid>
</SubscriberList vectorOutput>
```

#### 3.7.196.1 Parameters

Parameter	Direction	Size	Description
SubscriberAddres	:Sin	string	The managed object name, such as the service name, the IIS site name, the scheduled task name, the group name or the custom object name.
SubscriberType	in	string	The subscriber type. Possible values are SVC for managing services, IIS for managing IIS, TAS for managing scheduled tasks, GRP for security group members, COM for managing DCOM, and CUS for managing custom accounts.
SubscriberTarget	in	string	The target system the subscriber is from.
AccountTarget	in	string	The target system the associated account is from.
AccountLongID	in	string	The long ID of the associated account.
AccountShortID	in	string	The short ID of the associated account.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of SubscriberList_vectorOutput
id	out	string	The id of the subscriber.

Parameter	Direction	Size	Description
targetid	out	string	The target system the subscriber is from.
targetdesc	out	string	The description of the target system the subscriber is from.
accountid	out	string	The associated account ID.
subscribertype	out	string	The subscriber type. Possible values are SVC for managing services, IIS for managing IIS, TAS for managing scheduled tasks, GRP for security group members, COM for managing DCOM, and CUS for managing custom accounts.
objectname	out	string	The managed object name, such as the service name, the IIS site name, the scheduled task name, the group name or the custom object name.
objectsid	out	string	The SID of the object.
longid	out	string	The long ID of the associated account.
hostid	out	string	The target system the associated account is from.

## 3.7.197 TargetAttributeGet (*Bravura Security Fabric*)

Returns the attribute mapping between the product and its targets. The input parameters act as filters for the return values. If empty filters are specified, all attribute definitions are returned without filtering. A zero length filter text equals not specified. If the 'targetid' filter is specified, then any 'platformid' input parameter is always ignored, and the platform that will be filtered is the default platform for the specified 'targetid'. The result will include:

- target level overrides and mappings
- target type level overrides and mappings
- · default mappings to profile attributes

If the 'targetid' filter is not specified and 'platformid' input filter is specified, then the result will not include attributes that are defined on the Target Level. It will be filtered to contain the attributes defined for the specified platform and default mappings only.

TargetAttributeGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

This function accepts and/or returns platform type ID values. See Platform Type ID Values for the list of possible values.

#### Form of Request

#### Form of Response

```
<updateaction>...</updateaction>
  stattr>...</listattr>
  <setuserattr>...</setuserattr>
  <makediffs>...</makediffs>
</TargetAttributeGet_vectorOutput>
```

# **3.7.197.1 Parameters**

Parameter	Direction	Size	Description
targetattrid	in	string	(Optional) The target attribute ID.
targetid	in	string	(Optional) The target ID.
platformid	in	string	(Optional) The platform ID.
profileattrid	in	string	(Optional) The profile attribute ID.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of TargetAttributeGet_vectorOutput
targetattrid	out	string	The target attribute ID.

Parameter	Direction	Size	Description
targetid	out	string	The target ID.
platformid	out	string	The platform ID.
profileattrid	out	string	The profile attribute ID.
override	out	int	The override setting for the attribute. Override 1 is an override on Target Type level. Override 2 is an override on Target Level.
createaction	out	string	Action to perform when creating account. Restricted values: C - Exact copy, I - Ignore, R - Copy replacing ID, S - Set.
updateaction	out	string	Action to perform when updating account. Restricted values: S - Set always, C - Set when mapped profile attribute changes, I - Ignore.
listattr	out	int	Do we list this attribute?
setuserattr	out	int	Will this target attribute be used to set profile attribute values during auto-discovery?
makediffs	out	int	Should loaddb produce diffs on this attribute, for use with idtrack?

## 3.7.198 TargetGet (*Bravura Security Fabric*)

Retrieves information for a specified target.

This function accepts and/or returns platform type ID values. See Platform Type ID Values for the list of possible values.

#### Form of Request

#### Form of Response

```
<TargetGetResponse>
   <errmsg>...
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</TargetGetResponse>
<TargetGet vectorOutput>
    <targetid>...</targetid>
    <name>...</name>
    <platform>...</platform>
    <url>...</url>
    <address>...</address>
    <group>...
    <include>...</include>
    <casegen>...</casegen>
    <listgen>...</listgen>
    <mandatory>...</mandatory>
    <expusr>...</expusr>
    <delalias>...</delalias>
    <agenttime>...</agenttime>
    <listtime>...</listtime>
    <lstminsize>...</lstminsize>
    oxy>...
    <adminresethide>...</adminresethide>
    <claimalias>...</claimalias>
    <disablereset>...</disablereset>
    <selfresethide>...</selfresethide>
    <disableunlock>...</disableunlock>
    <adminunlockhide>...</adminunlockhide>
    <selfunlockhide>...</selfunlockhide>
    <adminclaimhide>...</adminclaimhide>
    <selfclaimhide>...</selfclaimhide>
    <mustselect>...
    <disableverify>...</disableverify>
    <isapp>...</isapp>
```

#### **3.7.198.1 Parameters**

ameter	Direction	Size	Description
etid	in	string	The ID of the target system.
sdat	in	string	The session handle from the previous API call.
nsg	out	string	A message describing the error or success resulting from the API call.
	out	int	The return code from the API call.
sdat	out	string	The session handle for the next API call.
out	out	array	An array of TargetGet_vectorOutput
etid	out	string	The ID of the target system.
ne	out	string	Description of the target system.
form	out	string	The type of the target system.
	out	string	(Optional) URL with target information for users.
ress	out	string	The network address of the target system.
ress	out	string	The network address of the target system.

Parameter	Direction	Size	Description
group	out	string	The target system group this target system belongs to.
include	out	int	Whether to include IDs if no IDInclude rule applies. 1 is true, 0 is false.
casegen	out	string	(Optional) Default or external program to generate new IDs in correct case (all upper, all lower, etc.).
listgen	out	string	(Optional) External program to convert this target system into a list of other target systems.
mandatory	out	int	Whether users must have at least one account on this target. 1 is true, 0 is false.
expusr	out	int	Whether to find users whose passwords will expire soon during auto discovery. 1 is true, 0 is false.
delalias	out	string	Whether users are allowed to delete accounts on this target. X is DEFAULT, T is ALLOW and F is BLOCK.
agenttime	out	int	Agent timeout, in seconds.
listtime	out	int	List timeout, in seconds.
Istminsize	out	int	Minimum list file size, in bytes.
proxy	out	string	Comma-delimited list of proxies.
adminresethide	out	int	Whether to allow administrators to change passwords using the <i>Hitachi ID Bravura Security Fabric</i> interface. 1 is deny, 0 is allow.
claimalias	out	int	Whether to allow other users to claim auto-associated accounts. 1 is allow, 0 is deny.
disablereset	out	int	Whether to allow users to reset their passwords. 1 is deny, 0 is allow.

Parameter	Direction	Size	Description
selfresethide	out	int	Whether to allow users to change passwords using the Bravura Security Fabric interface. 1 is deny, 0 is allow.
disableunlock	out	int	Whether to allow users to unlock their accounts. 1 is deny, 0 is allow.
adminunlockhide	out	int	Whether to allow administrators to unlock accounts using the <i>Bravura Security Fabric</i> interface. 1 is deny, 0 is allow.
selfunlockhide	out	int	Whether to allow users to unlock accounts using the Bravura Security Fabric interface. 1 is deny, 0 is allow.
adminclaimhide	out	int	Whether to allow administrators to attach accounts using the <i>Bravura Security Fabric</i> interface. 1 is deny, 0 is allow.
selfclaimhide	out	int	Whether to allow users to attach accounts using the Bravura Security Fabric interface. 1 is deny, 0 is allow.
mustselect	out	int	Whether accounts must be included in password changes. 1 is true, 0 is false.
disableverify	out	int	Whether to allow users to verify passwords. 1 is deny, 0 is allow.
isapp	out	int	Whether this target system is allowed in the certification process. 1 is allowed, 0 is denied.
selfmanagehide	out	int	Whether to allow users to update profile information and resources using the <i>Bravura Security Fabric</i> interface. 1 is deny, 0 is allow.
idarchivepush	out	int	Whether a <i>Hitachi ID Bravura Privilege</i> managed system should be automatically created for this target. 1 is true, 0 is false.
idcheck	out	int	Whether accounts should be checked for uniqueness when creating new profile IDs. 1 is true, 0 is false.
			parameters continued on next page

Parameter	Direction	Size	Description
createdon	out	string	The ISO-formatted UTC time this target system was created.
contattr	out	string	Attribute holding the value for _container_dn for this target system.
updserver	out	string	Server ID that will update this target.
managegrp	out	string	Auto-manage groups. N is NONE, O is OPEN, and M is MODERATED.
nrplatform	out	string	Type of network resource.
rbacenforce	out	int	Whether to enforce the target system under RBAC roles. 1 is true, 0 is false.
saction	out	string	Default action for surpluses of this resource. This will be one of the following actions: ADD, EXCEPTION, INHERIT, or REMOVE.
daction	out	string	Default action for deficits of this resource. This will be one of the following actions: ADD, EXCEPTION, INHERIT, or REMOVE.
type	out	string	The target type for auto-discovery. M is a manually added target, A is an auto-discovered target, T is A target template.

# 3.7.199 TokenPINReset (Bravura Pass)

Reset the PIN on a secure authentication token.

#### Form of Request

#### Form of Response

## **3.7.199.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The user's profile ID.
targetid	in	string	The target containing the authentication token.
tokenid	in	string	The token ID.
newpin	in	string	The new PIN for the token. If this value is not specified, a random PIN is generated and returned as output for this function.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of TokenPINReset_vectorOutput
newpin	out	string	The specified new PIN or auto-generated new PIN.

# 3.7.200 TokenResynchronize (*Bravura Security Fabric*)

Resynchronize a secure authentication token, by supplying a current passcode that appears on the token as well as the following passcode that appears.

## Form of Request

#### Form of Response

## **3.7.200.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The user's profile ID.
targetid	in	string	The target containing the authentication token.
tokenid	in	string	The token ID.
firstcode	in	string	The first passcode.
secondcode	in	string	The second passcode.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.201 TranslationGet (Bravura Security Fabric)

Retrieves a translated string from the errmsg.kvg file. If translated text does not exist for the specified language, the untranslated tag is returned.

## Form of Request

# Form of Response

## **3.7.201.1 Parameters**

Parameter	Direction	Size	Description
tag	in	string	The tag to look up.
language	in	string	The language identifier, composed of language and region. e.g. en-us
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of TranslationGet_vectorOutput
translation	out	string	The translated string

# 3.7.202 UCPGeneric1Check (Bravura Security Fabric)

Tests if a user is an actor in a UCP

# Form of Request

## Form of Response

#### **3.7.202.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant	in	string	Profile ID to test that maps to the participant
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric1Check_vectorOutput
			parameters continued on next nage

Parameter	Direction	Size	Description
ismember	out	int	Whether the participant is a member of the UCP

# 3.7.203 UCPGeneric1List (*Bravura Security Fabric*)

Lists the members of the specified UCP actor

UCPGeneric1List streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.203.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric1List_vectorOutput
member	out	string	Profile ID of the member of the UCP

# 3.7.204 UCPGeneric1UCAdd (*Bravura Security Fabric*)

Add user class to a single-actor generic UCP and associates it to the participant

#### Form of Request

## Form of Response

#### **3.7.204.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucid	in	string	UC ID
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric1UCAdd_vectorOutput
			parameters continued on next nage

Parameter	Direction	Size	Description
ucpmembershipid out		string Unique identifier for this user	Unique identifier for this userclass mapping.
ucpmembershipia out		ou nig	Critque tecritation for time economics mapping.

# 3.7.205 UCPGeneric1UserclassSet (*Bravura Security Fabric*)

Change participant mappings on an existing user class in a single-actor UCP.

## Form of Request

## Form of Response

#### **3.7.205.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucpmembershipid	in	string	Unique identifier for this userclass mapping.
mapToParticipant	in	string	The user class participant to which Participant should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.206 UCPGeneric2Check (*Bravura Security Fabric*)

Tests if a user is an actor in a UCP

### Form of Request

## Form of Response

## **3.7.206.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant1	in	string	Profile ID to test that maps to the first participant
participant2	in	string	Profile ID to test that maps to the second participant
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric2Check_vectorOutput
ismember	out	int	Whether the participant is a member of the UCP
			·

# 3.7.207 UCPGeneric2ListParticipant1 (*Bravura Security Fabric*)

Lists the profiles that match the first participant given the other participants.

UCPGeneric2ListParticipant1 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.207.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant2	in	string	other actor
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric2ListParticipant1_vectorOutput
member	out	string	Profile ID of the first particpant of the UCP

# 3.7.208 UCPGeneric2ListParticipant2 (*Bravura Security Fabric*)

Lists the profiles that match the second participant given the other participants.

UCPGeneric2ListParticipant2 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.208.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant1	in	string	other actor
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric2ListParticipant2_vectorOutput
member	out	string	Profile ID of the second particpant of the UCP

# 3.7.209 UCPGeneric2UCAdd (Bravura Security Fabric)

Adds user classes to a dual-actor generic UCP and associates them to participants

#### Form of Request

## Form of Response

#### **3.7.209.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucid	in	string	UC ID
mapto1	in	string	The user class participant to which Participant1 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapto2	in	string	The user class participant to which Participant2 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric2UCAdd_vectorOutput
ucpmembership	oid out	string	Unique identifier for this userclass mapping.

# 3.7.210 UCPGeneric2UserclassSet (*Bravura Security Fabric*)

Change participant mappings on an existing user class in a two-actor UCP.

### Form of Request

#### Form of Response

## **3.7.210.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucpmembersh	<i>ipid</i> in	string	Unique identifier for this userclass mapping.
mapToParticipant1 in		string	The user class participant to which Participant1 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapToParticipant2in		string	The user class participant to which Participant2 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.211 UCPGeneric3Check (*Bravura Security Fabric*)

Tests if a user is an actor in a UCP

### Form of Request

#### Form of Response

#### **3.7.211.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant1	in	string	Profile ID to test that maps to the first participant
participant2	in	string	Profile ID to test that maps to the second participant
participant3	in	string	Profile ID to test that maps to the third participant
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric3Check_vectorOutput
ismember	out	int	Whether the participant is a member of the UCP

# 3.7.212 UCPGeneric3ListParticipant1 (*Bravura Security Fabric*)

Lists the profiles that match the first participant given the other participants.

UCPGeneric3ListParticipant1 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.212.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant2	in	string	other actor
		Ü	
participant3	in	string	other actor
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric3ListParticipant1_vectorOutput
member	out	string	Profile ID of the first particpant of the UCP

# 3.7.213 UCPGeneric3ListParticipant2 (*Bravura Security Fabric*)

Lists the profiles that match the second participant given the other participants.

UCPGeneric3ListParticipant2 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.213.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant1	in	string	other actor
participant3	in	string	other actor
ραποιραπο		String	other deter
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric3ListParticipant2_vectorOutput
member	out	string	Profile ID of the second particpant of the UCP

# 3.7.214 UCPGeneric3ListParticipant3 (*Bravura Security Fabric*)

Lists the profiles that match the third participant given the other participants.

UCPGeneric3ListParticipant3 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.214.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant1	in	string	other actor
partioipanti		String	other deter
participant2	in	string	other actor
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric3ListParticipant3_vectorOutput
member	out	string	Profile ID of the first particpant of the UCP

## 3.7.215 UCPGeneric3UCAdd (*Bravura Security Fabric*)

Adds user classes to a triple-actor generic UCP and associates them to participants

#### Form of Request

## Form of Response

## **3.7.215.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucid	in	string	UC ID
mapto1	in	string	The user class participant to which Participant1 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapto2	in	string	The user class participant to which Participant2 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.

Parameter	Direction	Size	Description
mapto3	in	string	The user class participant to which Participant3 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric3UCAdd_vectorOutput
ucpmembershi	<i>ipid</i> out	string	Unique identifier for this userclass mapping.

## 3.7.216 UCPGeneric3UserclassSet (*Bravura Security Fabric*)

Change participant mappings on an existing user class in a three-actor UCP.

## Form of Request

### Form of Response

## **3.7.216.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucpmembershi	<i>ipid</i> in	string	Unique identifier for this userclass mapping.
mapToParticipa	<i>ant1</i> in	string	The user class participant to which Participant1 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapToParticipa	<i>ant2</i> in	string	The user class participant to which Participant2 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapToParticipa	<i>ant3</i> in	string	The user class participant to which Participant3 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.217 UCPGeneric4Check (*Bravura Security Fabric*)

Tests if a user is an actor in a UCP

## Form of Request

## Form of Response

## **3.7.217.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
participant1	in	string	Profile ID to test that maps to the first participant
participant2	in	string	Profile ID to test that maps to the second participant
participant3	in	string	Profile ID to test that maps to the third participant
participant4	in	string	Profile ID to test that maps to the four participant
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric4Check_vectorOutput
ismember	out	int	Whether the participant is a member of the UCP

# 3.7.218 UCPGeneric4ListParticipant1 (*Bravura Security Fabric*)

Lists the profiles that match the first participant given the other participants.

UCPGeneric4ListParticipant1 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

### **3.7.218.1 Parameters**

Parameter	Direction	Size	Description	
ucpid	in	string	UCP ID	
participant2	in	string	other actor	
participant3	in	string	other actor	
participant4	in	string	other actor	

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric4ListParticipant1_vectorOutput
member	out	string	Profile ID of the first particpant of the UCP

## 3.7.219 UCPGeneric4ListParticipant2 (*Bravura Security Fabric*)

Lists the profiles that match the second participant given the other participants.

UCPGeneric4ListParticipant2 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

### **3.7.219.1 Parameters**

Parameter	Direction	Size	Description	
ucpid	in	string	UCP ID	
participant1	in	string	other actor	
participant3	in	string	other actor	
participant4	in	string	other actor	

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric4ListParticipant2_vectorOutput
member	out	string	Profile ID of the second particpant of the UCP

## 3.7.220 UCPGeneric4ListParticipant3 (*Bravura Security Fabric*)

Lists the profiles that match the third participant given the other participants.

UCPGeneric4ListParticipant3 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

### **3.7.220.1 Parameters**

Parameter	Direction	Size	Description	
ucpid	in	string	UCP ID	
иоріа		oung	001 ID	
participant1	in	string	other actor	
participant2	in	string	other actor	
participant4	in	string	other actor	

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric4ListParticipant3_vectorOutput
member	out	string	Profile ID of the third particpant of the UCP

## 3.7.221 UCPGeneric4ListParticipant4 (*Bravura Security Fabric*)

Lists the profiles that match the fourth participant given the other participants.

UCPGeneric4ListParticipant4 streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

### **3.7.221.1 Parameters**

Parameter	Direction	Size	Description	
ucpid	in	string	UCP ID	
participant1	in	string	other actor	
participant2	in	string	other actor	
participant3	in	string	other actor	

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric4ListParticipant4_vectorOutput
member	out	string	Profile ID of the fourth particpant of the UCP

# 3.7.222 UCPGeneric4UCAdd (Bravura Security Fabric)

Adds user classes to a four-actor generic UCP and associates it to actors

#### Form of Request

#### Form of Response

## **3.7.222.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucid	in	string	UC ID
mapto1	in	string	The user class participant to which Participant1 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.

Parameter	Direction	Size	Description
mapto2	in	string	The user class participant to which Participant2 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapto3	in	string	The user class participant to which Participant3 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapto4	in	string	The user class participant to which Participant4 should be mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGeneric4UCAdd_vectorOutput
ucpmembershi	<i>ipid</i> out	string	Unique identifier for this userclass mapping.

# 3.7.223 UCPGeneric4UserclassSet (*Bravura Security Fabric*)

Change participant mappings on an existing user class in a four-actor UCP.

#### Form of Request

#### Form of Response

### **3.7.223.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucpmembersh	<i>ipid</i> in	string	Unique identifier for this userclass mapping.
mapToParticipa	<i>ant1</i> in	string	The user class participant to which Participant1 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapToParticipa	<i>ant2</i> in	string	The user class participant to which Participant2 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.

Parameter	Direction	Size	Description
mapToParticipant3in		string	The user class participant to which Participant3 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
mapToParticip	<i>ant4</i> in	string	The user class participant to which Participant4 should be re-mapped. Leave this blank if there is no user class participant to which the user class point participant should be mapped.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.224 UCPGenericCreate (Bravura Security Fabric)

Initializes a generic user class point

## Form of Request

### Form of Response

## **3.7.224.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucptype	in	string	Valid pointids: GENERICSINGLE - single-actor ucp GENERICDOUBLE - double-actor ucp GENERICTRIPLE - triple-actor ucp GENERICFOUR - four-actor ucp
criteriap	in	string	U - Union (match any user classes) I - Intersection (match all user class)
description	in	string	Description of category (resgroup description)
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.225 UCPGenericDelete (*Bravura Security Fabric*)

## Deletes a generic user class point

## Form of Request

## Form of Response

## **3.7.225.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucptype	in	string	Valid pointids: GENERICSINGLE - single-actor ucp GENERICDOUBLE - double-actor ucp GENERICTRIPLE - triple-actor ucp GENERICFOUR - four-actor ucp
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.226 UCPGenericGet (*Bravura Security Fabric*)

#### Gets UCP criteria

## Form of Request

## Form of Response

## **3.7.226.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucptype	in	string	Valid pointids: GENERICSINGLE - single-actor ucp GENERICDOUBLE - double-actor ucp GENERICTRIPLE - triple-actor ucp GENERICFOUR - four-actor ucp
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Direction	Size	Description
out	string	The session handle for the next API call.
out	array	An array of UCPGenericGet_vectorOutput
out	string	Valid criteriaps: U - Union I - Intersection
out	String	valid differilaps. S. Chieff F. Inforceducti
out	string	Description of category (resgroup description)
	out out out	out string out array out string

# 3.7.227 UCPGenericSet (*Bravura Security Fabric*)

#### Sets UCP criteria

## Form of Request

### Form of Response

## **3.7.227.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucptype	in	string	Valid pointids: GENERICSINGLE - single-actor ucp GENERICDOUBLE - double-actor ucp GENERICTRIPLE - triple-actor ucp GENERICFOUR - four-actor ucp
criteriap	in	string	Valid criteriaps: U - Union I - Intersection
description	in	string	Description of category (resgroup description)
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.228 UCPGenericUCDelete (*Bravura Security Fabric*)

Deletes a user class from a generic UCP

## Form of Request

## Form of Response

### **3.7.228.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucptype	in	string	Valid pointids: GENERICSINGLE - single-actor ucp GENERICDOUBLE - double-actor ucp GENERICTRIPLE - triple-actor ucp GENERICFOUR - four-actor ucp
ucpmembershipia	' in	string	Unique identifier for this userclass mapping.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.229 UCPGenericUCGet (*Bravura Security Fabric*)

Lists the user classes belonging to a UCP as well as the mappings

UCPGenericUCGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

### Form of Response

### **3.7.229.1 Parameters**

Parameter	Direction	Size	Description
ucpid	in	string	UCP ID
ucptype	in	string	Valid pointids: GENERICSINGLE - single-actor ucp GENERICDOUBLE - double-actor ucp GENERICTRIPLE - triple-actor ucp GENERICFOUR - four-actor ucp

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UCPGenericUCGet_vectorOutput
ucid	out	string	User class ID
ucpmembershipi	d out	string	User class GUID
actor	out	string	Name of user class point participant
mapto	out	string	Name of user class actor mapped to UCP participant

## 3.7.230 UserAccountAdd (*Bravura Security Fabric*)

Manually associates an existing target account with a *Hitachi ID Bravura Security Fabric* profile ID. The API caller needs the "Attach existing IDs" ACL to be able to run this function properly.

## Form of Request

## Form of Response

## **3.7.230.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID
uscriu		String	The profile 15
targetid	in	string	The target of the account
longid	in	string	The longid of the account
flag	in	int	Determines which flag is set when an account is associated with a profile ID. Accepted values are 0 = NONE, 1 = USER, and 2 = HELPDESK.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

## 3.7.231 UserAccountDelete (*Bravura Security Fabric*)

Removes the specified account association from the given *Hitachi ID Bravura Security Fabric* profile ID. The API caller needs the "Attach existing IDs" ACL to be able to run this function properly.

## Form of Request

### Form of Response

## **3.7.231.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID.
targetid	in	string	The target of the account.
longid	in	string	The longid of the account.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.232 UserAccountsGet (*Bravura Security Fabric*)

Retrieves the list of account(s) on target systems for the given profile ID. The API caller needs the "manage profile status" ACL to run this function properly.

UserAccountsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

This function accepts and/or returns platform type ID values. See Platform Type ID Values for the list of possible values.

### Form of Request

#### Form of Response

### **3.7.232.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
resetOnly	in	int	If this is specified and set to 1, return only accounts on targets that allow the password reset operation.
verifyOnly	in	int	If this is specified and set to 1, return only accounts on targets that allow the password verify operation.
unlockOnly	in	int	If this is specified and set to 1, return only accounts on targets that allow the account unlock operation.
challengerespo	onse <b>i</b> @nly	int	If this is specified and set to 1, return only accounts on targets which are challenge/response target.
tokenOnly	in	int	If this is specified and set to 1, return only accounts on targets which are token target.
platformid	in	string	If this is nonempty, return only accounts on this platform type.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserAccountsGet_vectorOutput
			parameters continued on next page

Parameter	Direction	Size	Description
longid	out	string	The long ID of the account.
shortid	out	string	The short ID of the account.
targetid	out	string	The ID of the target where the account resides.
tgroupid	out	string	The ID of the target group where the account resides.
tsynch	out	int	If set to 1, a password reset on this account should cause accounts in the same target group to be synchronized. If set to 0, do not synchronize.
unqpass	out	int	If set to 1, passwords in this target group require a unique password. If set to 0, there is no uniqueness requirement.

# 3.7.233 UserAccountsUnlock (*Bravura Pass*, *Bravura Identity*)

Unlocks accounts associated with a profile. If no accounts are specified, all associated accounts are unlocked. The API caller needs the "Unlock accounts" ACL to be able to run this function properly.

UserAccountsUnlock streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

### **3.7.233.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The user profile ID to be unlocked.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of accounts_vectorInput
longid	in	string	The account ID to unlock.
targetid	in	string	The ID identifying the target to unlock account.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserAccountsUnlock_vectorOutput
longid	out	string	Account ID on which an unlock operation was attempted.
targetid	out	string	The corresponding target ID.
result	out	int	The result of the unlock operation. 0 is success, values other than 0 is failure.
retmsg	out	string	Messages returned from the operation.

# 3.7.234 UserAdminAclTest (Bravura Identity, Bravura Privilege, Access Certifier)

Determine if the user has the given ACL (Access to product features).

### Form of Request

# Form of Response

### **3.7.234.1 Parameters**

Direction	Size	Description
in	string	A profile ID of the user being checked.
in	string	The admin ACL string for checking, eg. apicaller, maintain, replication, etc.
in	string	The session handle from the previous API call.
out	string	A message describing the error or success resulting from the API call.
out	int	The return code from the API call.
out	string	The session handle for the next API call.
	in in out	in string in string in string out string out int

Parameter	Direction	Size	Description
output	out	array	An array of UserAdminAclTest_vectorOutput
hasacl	out	int	Whether the user has given Acl, 0 means no, anything else means yes

# 3.7.235 UserAnswerDelete (*Bravura Security Fabric*)

Delete question set answers on a user profile.

# Form of Request

# Form of Response

### **3.7.235.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The user profile ID identifying the user to validate answers.
qsid	in	string	The question set ID the question belongs to. Match all user questions if not specified.
qid	in	string	The question ID as returned by UserQuestionsGet. Match all questions within given question set if not specified.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.236 UserAnswerSet (*Bravura Security Fabric*)

Set an answer to a question on a user profile.

# Form of Request

## Form of Response

# **3.7.236.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The user profile ID identifying the user to validate answers.
qsid	in	string	The question set ID the question belongs to.
question	in	string	The text of the question.
answer	in	string	The answer to set for the question.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.237 UserAnswersValidate (*Bravura Security Fabric*)

Validate a set of answers against the stored answers in a user profile. If this function succeeds, the supplied answers match the stored answers. The API caller needs "View security questions" ACL to be able to run this function properly.

UserAnswersValidate will return one of the following:

- API\_SUCCESS: The supplied answers match the stored answers.
- ERR\_VERIFY\_FAIL: At least one answer didn't match the stored answer.
- ERR\_LOCKED\_OUT: Exceeded the system defined MAX\_USERAUTH\_FAILURE, user profile has been locked out.

### Form of Request

#### Form of Response

#### **3.7.237.1 Parameters**

n	string	The user profile ID identifying the user to validate
		answers.
n	string	The session handle from the previous API call.
n	array	An array of answers_vectorInput
		· · · · · · · · · · · · · · · · · · ·

Parameter	Direction	Size	Description
answer	in	string	The answer to test.
qid	in	string	The question identifier, as returned from UserQuestionsGet or QSetQuestionsGet.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.238 UserAttrsGet (Bravura Security Fabric)

Retrieves the attributes of the given profile ID.

UserAttrsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

# Form of Response

# **3.7.238.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserAttrsGet_vectorOutput
name	out	string	The name of the attribute.
value	out	string	The value of the attribute.

# 3.7.239 UserDisable (*Bravura Security Fabric*)

Disable the given user profile or, if specified, associated accounts on target systems.

If allAccounts is false or 0 and there are no account/target pairs specified, disable the profile. The API caller needs the "Manage profile status" ACL to be able to run this function in this fashion. In this case, no output is provided.

If allAccounts is true or 1, any account/target pairs are ignored and all of the user's accounts are disabled. Otherwise, all account/target pairs are disabled. The API caller needs the "Disable account" ACL to be able to run this function in this fashion. In this case, output defines the success of each operation.

UserDisable streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

# Form of Request

## Form of Response

# **3.7.239.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
allAccounts	in	int	Disable all accounts associated with the user. If allAccounts is 1 or true, then any account/target pairs passed in will be ignored. If allAccounts is 0 and no account/target pairs are provided, then only profile is disabled.
disabledreason	in	string	(Optional) Reason for disabling user profile.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of accounts_vectorInput
longid	in	string	The ID of the account to disable.
targetid	in	string	The ID of the target where the account resides.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserDisable_vectorOutput
longid	out	string	Account ID on which a disable operation was attempted.

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Parameter	Direction	Size	Description
targetid	out	string	The ID of the target where the account resides.
result	out	int	The disable result on the account/target pair. 0 is success, 1 is failure
retmsg	out	string	Messages returned from the operation.

# 3.7.240 UserEnable (*Bravura Security Fabric*)

Enable the given user profile or, if specified, associated accounts on target systems.

If allAccounts is false or 0 and there are no account/target pairs specified, enable the profile. The API caller needs the "Manage profile status" ACL to be able to run this function in this fashion. In this case, no output is provided.

If allAccounts is true or 1, any account/target pairs are ignored and all of the user's accounts are enabled. Otherwise, all account/target pairs are enabled. The API caller needs the "Enable account" ACL to be able to run this function in this fashion. In this case, output defines the success of each operation.

UserEnable streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

#### Form of Response

### **3.7.240.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
allAccounts	in	int	Enable all accounts associated with the user. If allAccounts is 1 or true, then any account/target pairs passed in will be ignored. If allAccounts is 0 and no account/target pairs are provided, then only the user profile is enabled.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of accounts_vectorInput
longid	in	string	The ID of the account to enable.
targetid	in	string	The ID of the target where the account resides.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserEnable_vectorOutput
longid	out	string	Account ID on which an enable operation was attempted.
targetid	out	string	The ID of the target where the account resides.
			parameters continued on next page

Parameter	Direction	Size	Description
result	out	int	The enable result on the account/target pair. 0 is success, 1 is failure
retmsg	out	string	Messages returned from the operation.

# 3.7.241 UserGetByAccount (Bravura Security Fabric)

Retrieves user ID(s), by the given account on target(s).

UserGetByAccount streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

### Form of Response

## **3.7.241.1 Parameters**

Parameter	Direction	Size	Description
longid	in	string	The account ID on the target system.
targetid	in	string	The ID of the target. If empty, all users with an matching longid on any target will be listed.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserGetByAccount_vectorOutput
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
isadmin	out	int	Whether the user is a console user. 1 is true, 0 is false.

# 3.7.242 UserGetByAcctAttr (*Bravura Security Fabric*)

Retrieves user profile IDs by the given target attribute value.

UserGetByAcctAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

#### Form of Response

#### **3.7.242.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID of the target on which the account resides.
attrkey	in	string	The name of the target attribute key.
value	in	string	The value of the account attribute.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserGetByAcctAttr_vectorOutput
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
isadmin	out	int	Whether the user is a console user. 1 is true, 0 is false.

# 3.7.243 UserGetByGroup (*Bravura Security Fabric*)

Retrieves user ID(s), by the given group. If the specified group does not have any member, no users will be returned.

UserGetByGroup streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

# Form of Response

### **3.7.243.1 Parameters**

Parameter	Direction	Size	Description	
groupid	in	string	The group ID	
targetid	in	string	The ID of the target.	

Parameter	Direction	Size	Description
directonly	in	int	Whether to include users with accounts belonging only to the given group, or belonging also to its child groups. 0(zero)=include users with accounts in both the given group and its child groups, otherwise include users with accounts only in given group.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserGetByGroup_vectorOutput
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
isadmin	out	int	Whether the user is a console user.

# 3.7.244 UserGetByID (*Bravura Security Fabric*)

Retrieves the basic profile of the given user ID.

## Form of Request

## Form of Response

## **3.7.244.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserGetByID_vectorOutput
			parameters continued on next page

Parameter	Direction	Size	Description
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
guid	out	string	The internal guid of the user.
isadmin	out	int	Whether the user is a console user. 1 is true, 0 is false.

# 3.7.245 UserGetByReqAttr (Bravura Security Fabric)

Retrieves user profile IDs by the given profile attribute value.

UserGetByReqAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

# Form of Response

## **3.7.245.1 Parameters**

Parameter	Direction	Size	Description
attrkey	in	string	The name of the request attribute.
value1	in	string	The value of the request attribute. If value2 is different, then value1 is the minimum of a range of values for the request attribute.

Parameter	Direction	Size	Description
value2	in	string	The maximum of a range of values for the request attribute. This should be the same as value1 if the range to search for is a single value.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserGetByReqAttr_vectorOutput
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
isadmin	out	int	Whether the user is a console user. 1 is true, 0 is false.

# 3.7.246 UserGroupsGet (*Bravura Security Fabric*)

Retrieves the managed groups to which the given user belongs on target systems.

UserGroupsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.246.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
directonly	in	int	False will include parent groups in the result
handle	in	string	The stream handle for fetching the next result from this
nanaio		July	call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserGroupsGet_vectorOutput
longid	out	string	The account ID.
groupid	out	string	The ID of the managed target group.
targetid	out	string	The ID of the target where the group exists.
direct	out	int	1 if user is directly associated with usergroup. 0 otherwise.

# 3.7.247 UserIVRList (Bravura Pass)

Retrieves a list of profile IDs matching the specified numeric ID. The API caller needs the "register voice print" ACL to run this function properly.

UserIVRList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.247.1 Parameters**

Parameter	Direction	Size	Description
numid	in	string	The numeric ID to search for.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserIVRList_vectorOutput
userid	out	string	A profile ID that matched the given numeric ID.
name	out	string	The profile's full name.
status	out	string	A flag indicating the profile's status. D is disabled by an administrator, L is locked out due to invalid authentication, A is active.

# 3.7.248 UserList (Bravura Security Fabric)

List all valid profiles.

UserList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

# Form of Request

# Form of Response

## **3.7.248.1 Parameters**

Parameter	Direction	Size	Description
excludeAdmins	in	int	If nonzero, exclude console-only users from the list.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserList_vectorOutput
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
isadmin	out	int	Whether the user is a console user.
guid	out	string	The internal guid of the user.

# 3.7.249 UserLockoutSet (Bravura Security Fabric)

Sets user profile attributes related to lockouts. The API caller needs the "Unlock user profile" ACL to be able to run this function properly.

# Form of Request

### Form of Response

# **3.7.249.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
locked	in	int	The locked status of the user profile. 1 = locked, 0 = unlocked. Specify -1 to ignore this value.
lastok	in	string	The ISO-formatted UTC time of the user's last successful login. Specify an empty string to ignore this value.
lastfail	in	string	The ISO-formatted UTC time of the user's last unsuccessful login. Specify an empty string to ignore this value.
failcount	in	int	The number of consecutive times the user has failed to log in. Specify -1 to ignore this value.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.250 UserPasswordSync (Bravura Pass)

Resets passwords on one or more accounts associated with a specified profile. If no accounts are specified, all associated accounts on resettable targets are reset. If a target ID is specified but an account ID is not specified, then all associated accounts on that target are reset.

Depending on target group configuration, accounts that are associated to the same profile and in the same target group as the specified account may also be synchronized. The API caller needs the "change passwords" ACL to run this function properly.

UserPasswordSync streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

#### Form of Response

# **3.7.250.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID associated with the specified account(s).
password	in	string	The new password.
expire	in	int	If set to 1, also expire the accounts when setting a new password. If set to 2, only expire the accounts and do not set a new password. Otherwise, only set a new password.
queue	in	int	If set to 1, send the password changes to the Hitachi ID Bravura Privilege service and return immediately. If set to 0, perform the password changes and wait for them to complete before returning.
ignoretsynch	in	int	If set to 1, ignore target group settings and only work on input accounts. If set to 0, consider target group tsynch option.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of accounts_vectorInput
targetid	in	string	The target ID of the account to reset.
accountid	in	string	The account ID to reset.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserPasswordSync_vectorOutput
numAffected	out	int	The number of generated passwords.
accountid	out	string	Account ID on which a password reset was attempted.
targetid	out	string	The target system ID where the account resides.
result	out	int	The password set result on the account/target pair. 0 is success, 1 is failure
retmsg	out	string	The message returned from the operation.

## 3.7.251 UserPasswordVerify (*Bravura Security Fabric*)

Verify a password on a target account. The API caller needs the "change passwords" ACL to be able to run this function properly.

## Form of Request

#### Form of Response

#### **3.7.251.1 Parameters**

Parameter	Direction	Size	Description
targetid	in	string	The ID identifying the target to verify the user's password.
longid	in	string	The account long ID to be verified.
password	in	string	The password to be verified.
userid	in	string	The profile ID associated with the account (optional).
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserPasswordVerify_vectorOutput
verifyresult	out	int	The verification result. 0 is success, 1 is failure.
retmsg	out	string	The message returned by idpm.

## 3.7.252 UserPinValidate (*Bravura Pass*)

Retrieves the user profile ID according to the pin input if it's valid, otherwise returns nothing. The API caller needs the "register voice print" ACL to run this function properly.

## Form of Request

## Form of Response

#### **3.7.252.1 Parameters**

Parameter	Direction	Size	Description
pin	in	string	The pin associated with a profile ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserPinValidate_vectorOutput
userid	out	string	The userid who has the input pin.

## 3.7.253 UserPinValidateEx (*Bravura Pass*)

Retrieves the user profile ID according to the pin input if it's valid, otherwise returns nothing. The API caller needs the "register voice print" ACL to run this function properly.

## Form of Request

## Form of Response

## **3.7.253.1 Parameters**

Parameter	Direction	Size	Description
pin	in	string	The pin for which to get user profile ID.
userid	in	string	The user profile ID.
sessdat	in	string	The session handle from the previous API call.
		3	
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
70	out	пц	The retain code from the Ar Foali.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of UserPinValidateEx_vectorOutput
userid	out	string	The userid who has the input pin.

## 3.7.254 UserQuestionsGet (Bravura Security Fabric)

Get questions from a specified user's profile. The questions returned are randomly chosen from the available set of questions for this profile. The API caller needs "View security questions" ACL to be able to run this function properly.

UserQuestionsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.254.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile to retrieve questions from.
numpick	in	int	The number of questions to pick for this user. When specified as 0 and ivr is 1, pick the minimum number of questions from each ivr question set and return all of them together.

Parameter	Direction	Size	Description
ivr	in	int	Specify whether the function is to get ivr questions only.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserQuestionsGet_vectorOutput
qid	out	string	The ID used to identify the question.
question	out	string	The question text.
qfileid	out	string	The question wav file ID to be used by <i>Phone Password Manager</i> .

# 3.7.255 UserRoleAdd (Bravura Identity)

Add user to the role membership.

## Form of Request

## Form of Response

## **3.7.255.1 Parameters**

Parameter	Direction	Size	Description
uoorid	in	akida a	The week's identifier
userid	in	string	The user's identifier.
roleid	in	string	The role's identifier.
optional	in	int	Whether adding the user to role's optional membership. 1 means yes, otherwise no.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.256 UserRoleDelete (Bravura Identity)

Delete user from the role membership.

## Form of Request

## Form of Response

## **3.7.256.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The user's identifier.
roleid	in	atrina	The role's identifier.
roieia	III	string	The role's identifier.
sessdat	in	string	The session handle from the previous API call.
			A
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
		g	

## 3.7.257 UserSearch (*Bravura Security Fabric*)

Advanced search for users based on up to 5 search criteria. If there are no matches, returns API NO MORE DATA.

Be sure to grant the API user permission to read the relevant attributes in the profiles of the users being searched. For example, if you wish to search on an attribute such as SSN, and that attribute is protected such that only the user themselves and/or users in HR can read it, then UserSearch() will fail to search on this profile attribute. You fix that by creating a security group that allows your API user to read this attribute.

UserSearch streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

#### **3.7.257.1 Parameters**

Parameter	Direction	Size	Description
matchAny	in	int	Flag indicating whether search should match on any of the criteria (1) or all of the criteria (0).
inclinvalid	in	int	Flag indicating whether search results should include invalid users.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of criteria_vectorInput
field	in	string	Field to be searched against. Acceptable values are userid, name, hostsearch, groupsearch, rolesearch, directmanager, indirectmanager. This field is susceptible to change depending on the search engine keys defined. Profile attributes should be searched using the attribute vector input. If searching a field, attribute input should be empty. If searching a profile attribute, field input should be empty. Valid search fields: USERID, USERNAME, GROUPID, ROLEID, TARGETID, DIRECT_MANAGER, ALL_MANAGERS
attribute	in	string	Profile attribute to be searched against. Any profile attribute defined can be searched for, but ACLs will be checked against and filtered for. Defined fields should be searched using the field vector input. If searching a field, attribute input should be empty. If searching a profile attribute, field input should be empty.

Parameter	Direction	Size	Description
comparator	in	string	String indicating the type of comparison to perform. Comparators use the following values: EQ - "is equal to" (strings, integers, dates, boolean) NEQ - "is not equal to" (strings, integers, dates, boolean) LT - "is less than" (strings, integers, dates) LTE - "is less than or equal to" (strings, integers, dates) GT - "is greater than" (strings, integers, dates) GTE - "is greater than or equal to" (strings, integers, dates) CT - "contains" (strings) NCT - "does not contain" (strings) IS - "exists or not exists" (strings, integers, dates, boolean)
value	in	string	The value being filtered against. Note that the value needs to correspond to the field or attribute.datatype being searched for. Possible types: strings, integers, dates, or boolean values. Date type require date format YYYY-MM-DD for date only, or YYYY-MM-DD HH:mm for date and time. Note that the API does not do any UTC-timezone conversion. So if you input a DateTime value, it has to be coherent with the matching value as seen in the database. Not the value presented by the Suite GUI (which most likely is converted to current timezone). Boolean type requires "EQ" or "NEQ" comparators and "TRUE" or "FALSE" values. Any type using "IS" comparator must use "SET" or "EMPTY" values.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserSearch_vectorOutput
userid	out	string	The profile ID of the user.
alias	out	string	The alias of the user.
			parameters continued on next page

Parameter	Direction	Size	Description
isadmin	out	int	Whether the user is a console user.
isinvalid	out	int	Whether the user is an invalid user.

# 3.7.258 UserSetValid (*Bravura Security Fabric*)

Make the given user profile valid or invalid. If setting it to valid, the profile is created if necessary. Future runs of auto-discovery may or may not retain this setting.

## Form of Request

## Form of Response

#### **3.7.258.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
ascria		String	The profile 15 of the door.
valid	in	int	When nonzero, make the given user profile valid. Otherwise, make the user profile invalid.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.259 UserSettingsGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

#### Get user settings

UserSettingsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.259.1 Parameters**

Parameter	Direction	Size	Description
profilename	in	string	Profile name
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next page

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserSettingsGet_vectorOutput
value	out	string	Combined user setting in JSON format

# 3.7.260 UserSettingsSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Set user settings based on a template

#### Form of Request

#### Form of Response

## **3.7.260.1 Parameters**

Parameter	Direction	Size	Description
profilename	in	string	Profile name ID
settings	in	string	Template in json format to be saved as user settings for a given profilename
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.261 UserSettingsTemplateDelete (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

## Delete user settings template

#### Form of Request

#### Form of Response

## **3.7.261.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	Template ID
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
onneg		Stg	from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
sessual	out	Sung	THE SESSION HANGE OF THE HEAT AFT CAIL.

# 3.7.262 UserSettingsTemplateGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

## Get user settings template

UserSettingsTemplateGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.262.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	Template ID
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next page

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserSettingsTemplateGet_vectorOutput
value	out	string	Template in JSON format

# 3.7.263 UserSettingsTemplateList (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Get list of user settings template

UserSettingsTemplateList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.263.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserSettingsTemplateList_vectorOutput
id	out	string	Template ID
value	out	string	Template in JSON format

# 3.7.264 UserSettingsTemplateSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

## Set user settings template

#### Form of Request

#### Form of Response

## **3.7.264.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	Template ID
settings	in	string	Settings to be saved as template
Settings		String	Gettings to be saved as template
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
crining	out	String	from the API call.
rc	out	int	The return code from the API call.
10	out	Ш	The return code from the AFT call.
sessdat	out	string	The session handle for the next API call.

# 3.7.265 UserStatDelete (*Bravura Security Fabric*)

Deletes a userstat record.

## Form of Request

## Form of Response

## **3.7.265.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
ustattag	in	string	The userstat tag.
usiallay	111	String	The userstat tag.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
ennisg	out	Stillig	from the API call.
***			The continue and a formation ADI and
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.266 UserStatGet (Bravura Security Fabric)

Retrieve userstat records for a specified user.

UserStatGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.266.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The profile ID of the user.
ustattag	in	string	The userstat tag to search for. If empty, return all userstat records.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserStatGet_vectorOutput
tag	out	string	The userstat tag.
cvalue	out	string	The userstat string value.

# 3.7.267 UserStatSet (Bravura Security Fabric)

Sets a userstat record.

## Form of Request

## Form of Response

## **3.7.267.1 Parameters**

Parameter	Direction	Size	Description
.,			
userid	in	string	The profile ID of the user.
ustattag	in	string	The userstat tag.
ustatval	in	string	The userstat string value.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.268 UserStatusGet (*Bravura Security Fabric*)

Gets user login status attributes. If the user has never attempted to log in, fails with API NO MORE DATA.

#### Form of Request

#### Form of Response

```
<UserStatusGetResponse>
    <errmsg>...</errmsg>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</UserStatusGetResponse>
<UserStatusGet_vectorOutput>
    <locked>...</locked>
    <disabled>...</disabled>
    <lastok>...
    <lastfail>...</lastfail>
    <failcount>...</failcount>
    <unlockby>...</unlockby>
    <statuschangedby>...</statuschangedby>
    <unlocktime>...</unlocktime>
    <statuschangedtime>...</statuschangedtime>
</UserStatusGet_vectorOutput>
```

#### **3.7.268.1 Parameters**

	Size	Description
n	string	The profile ID of the user.
n	string	The session handle from the previous API call.
out	•	A message describing the error or success resulting from the API call.
out	int	The return code from the API call.
r	n ut	n string ut string

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserStatusGet_vectorOutput
locked	out	int	The locked status of the user profile. $1 = locked$ , $0 = unlocked$ .
disabled	out	int	The disabled status of the user profile. 1 = disabled, 0 = enabled.
lastok	out	string	The ISO-formatted UTC time of the user's last successful login. If the user has never successfully logged in, returns an empty string.
lastfail	out	string	The ISO-formatted UTC time of the user's last unsuccessful login. If the user has never failed to login, returns an empty string.
failcount	out	int	The number of consecutive times the user has failed to log in.
unlockby	out	string	The ID of the last user to unlock the user profile.
statuschangedby	out	string	The ID of the last user to change the user profile's status.
unlocktime	out	string	The last time the user profile was unlocked, UTC, in ISO format. If the profile has never been unlocked, returns an empty string.
statuschangedtim	<i>ne</i> out	string	The last time the user profile's status was changed, in UTC, ISO format. If the profile's status has never been changed, returns an empty string.

# 3.7.269 UserVoiceRegStatGet (Bravura Pass)

Retrieves the user voice registration status The API caller needs the "register voice print" ACL to run this function properly.

## Form of Request

## Form of Response

#### **3.7.269.1 Parameters**

Direction	Size	Description
in	string	The user ID for which to get voice registration status
in	string	The session handle from the previous API call.
out	string	A message describing the error or success resulting
		from the API call.
out	int	The return code from the API call.
out	string	The session handle for the next API call.
out	array	An array of UserVoiceRegStatGet_vectorOutput
	in in out out	in string in string out string out int out string

Parameter	Direction	Size	Description
regflag	out	int	Whether the user is registered. Any value greater than 0 is registered, 0 is non-registered.

# 3.7.270 UserVoiceRegStatSet (Bravura Pass)

Sets the voice registration status. The API caller needs the "register voice print" ACL to run this function properly.

## Form of Request

## Form of Response

#### **3.7.270.1 Parameters**

Parameter	Direction	Size	Description
userid	in	string	The userid to set voice registration status.
regflag	in	int	Whether the user is to be registered. Any value greater than 0 is register, 0 is unregister.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.271 UserclassActorGet (*Bravura Security Fabric*)

Retrieves the actors used inside a userclass.

UserclassActorGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

## **3.7.271.1 Parameters**

Parameter	Direction	Size	Description
userclass	in	string	The userclass ID.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserclassActorGet_vectorOutput
actor	out	string	The actor.
desc	out	string	The description.
useexpr	out	int	Whether to use the list expression. 1 is true, 0 is false
exprdef	out	int	Whether to exclude all other criteria in the user class when using list expression. 1 is exclude, 0 is include
expression	out	string	List expression.

# 3.7.272 UserclassCacheRecalculate (*Bravura Security Fabric*)

Recalculate the membership cache of a user class.

## Form of Request

#### Form of Response

# **3.7.272.1 Parameters**

Parameter	Direction	Size	Description
userclass	in	string	The userclass ID.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
dat			
sessdat	out	string	The session handle for the next API call.

# 3.7.273 UserclassList (*Bravura Security Fabric*)

Lists userclasses matching the criteria specified

UserclassList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

### **3.7.273.1 Parameters**

Parameter	Direction	Size	Description
singleActor	in	int	A boolean that indicates if only single-actor userclasses should be returned.
excludeBuiltin	in	int	A boolean that indicates if builtin userclasses should be excluded from the result.
excludeDepreca	a <i>teđ</i> n	int	A boolean that indicates if deprecated userclasses should be excluded from the result.
			parameters continued on next page

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserclassList_vectorOutput
id	out	string	The userclass ID.
desc	out	string	The userclass description.

# 3.7.274 UserclassMemberListExplicit (*Bravura Security Fabric*)

Lists users explicitly assigned to the user class.

UserclassMemberListExplicit streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

# Form of Response

#### **3.7.274.1 Parameters**

Parameter	Direction	Size	Description
userclass	in	string	The userclass ID.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserclassMemberListExplicit_vectorOutput
userid	out	string	The user profile IDs that assigned to the user class.
memberguid	out	string	The internal guid of the member.

# 3.7.275 UserclassMembershipCheck (*Bravura Security Fabric*)

Check whether the scenario (actor:userid) specified matches the membership criteria of the user class.

#### Form of Request

#### Form of Response

# 3.7.275.1 Parameters

Parameter	Direction	Size	Description
userclass	in	string	The userclass ID.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of actors_vectorInput
actor	in	string	The actor.
userid	in	string	The profile ID taking the role of this actor.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserclassMembershipCheck_vectorOutput
ismember	out	int	Whether the scenario specified matches the membership criteria of the user class. 1 is true, 0 is false.

# 3.7.276 UserclassMembershipList (*Bravura Security Fabric*)

Lists the profile IDs for a given actor matching the scenario specified.

UserclassMembershipList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

# 3.7.276.1 Parameters

Parameter	Direction	Size	Description	
userclass	in	string	The userclass ID.	
actor	in	string	The actor to list.	

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of actors_vectorInput
actor	in	string	The other actor IDs.
userid	in	string	The profile ID taking the role of this actor.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserclassMembershipList_vectorOutput
userid	out	string	The profile IDs that match the scenario specified.

# 3.7.277 UserclassPointCacheRecalculate (*Bravura Security Fabric*)

Recalculate the membership cache of a user class point.

# Form of Request

# Form of Response

#### **3.7.277.1 Parameters**

Parameter	Direction	Size	Description
pointid	in	string	The user class point.
id	in	string	The instance of the user class point.
phase	in	int	The phase of the user class; if phases are not enabled, specify 1.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.278 UserclassPointList (*Bravura Security Fabric*)

Returns a list of available user class points. Depending on the licenses installed, some user class points may not be listed.

UserclassPointList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

# Form of Response

#### **3.7.278.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of UserclassPointList_vectorOutput
name	out	string	name of the user class point
description	out	string	description of the user class point

# 3.7.279 UserclassUserAdd (*Bravura Security Fabric*)

Adds a user explicitly to a user class.

# Form of Request

# Form of Response

# **3.7.279.1 Parameters**

Parameter	Direction	Size	Description
userclass	in	string	The userclass ID.
userid	in	string	User profile ID.
sessdat	in	atrina	The accessor handle from the provious ADI call
sessuai	Ш	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
			The victime and from the ADI cell
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
		g	

# 3.7.280 UserclassUserDelete (*Bravura Security Fabric*)

Removes an explicitly added user from a user class.

# Form of Request

# Form of Response

# **3.7.280.1 Parameters**

Parameter	Direction	Size	Description
userclass	in	string	The userclass ID.
userid	in	string	User profile ID.
sessdat	in	atrina	The accessor handle from the provious ADI call
sessuai	Ш	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
			The victime and from the ADI cell
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
		g	

# 3.7.281 VerifySystemCredential (*Bravura Security Fabric*)

Attempts to authenticate on a particular system with the given credentials. Warning: Using invalid credentials may result in account lockout!

This function accepts and/or returns platform type ID values. See Platform Type ID Values for the list of possible values.

# Form of Request

# Form of Response

#### **3.7.281.1 Parameters**

Parameter	Direction	Size	Description
platformtype	in	string	The type of agent to use to connect to this system.
address	in	string	The address of the system to connect to.
userid	in	string	The user ID to use when connecting.
password	in	string	The password to use when connecting.
proxy	in	string	The proxy of the system to connect to.
runas	in	int	Use runas?

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.282 WFAbstain (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Abstains from the specified batch for the logged-in user.

#### Form of Request

#### Form of Response

# **3.7.282.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reason	in	string	The reason for the abstention.
primary	in	string	The profile ID of the user on whose behalf this is being done. If blank, then delegation is not used.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.283 WFAccept (Bravura Identity, Bravura Privilege, Access Certifier, Bravura Group)

Accepts an implementation task as the logged-in user.

#### Form of Request

#### Form of Response

# **3.7.283.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reqacctsig	in	string	The action ID for this task.
primary	in	string	The profile ID of the user on whose behalf this is being
μα. γ		Sg	done. If blank, then delegation is not used.
sessdat	in	string	The session handle from the previous API call.
orrmog	out	otring	A magaza describing the array or august regulting
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
.•			
sessdat	out	string	The session handle for the next API call.

# 3.7.284 WFApprove (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Approves the specified batch for the logged-in user.

#### Form of Request

#### Form of Response

#### **3.7.284.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reason	in	string	The reason for the approval.
primary	in	string	The profile ID of the user on whose behalf this is being
			done. If blank, then delegation is not used.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
			from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.285 WFDecline (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Declines an implementation task as the logged-in user.

#### Form of Request

#### Form of Response

# **3.7.285.1 Parameters**

Parameter	Direction	Size	Description
batabaia	in	atvina	The ID identifying the hotels
batchsig	in	string	The ID identifying the batch.
reqacctsig	in	string	The action ID for this task.
reason	in	string	The reason for the declination.
primary	in	string	The profile ID of the user on whose behalf this is being done. If blank, then delegation is not used.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.286 WFDelegate (*Bravura Privilege*, *Bravura Identity*, *Access Certifier*, *Bravura Group*)

Add a delegate.

#### Form of Request

# Form of Response

# **3.7.286.1 Parameters**

Parameter	Direction	Size	Description
primary	in	string	The profile ID of the user whose responsibility will be delegated.
deleg	in	string	A profile ID for the delegate.
type	in	string	The type of the delegation. It could be one of BATCH, CERT, TASK or ALL.
batchid	in	string	A request batch ID for delegation.
itemid	in	string	A request item ID for delegation.
			parameters continued on next page

Parameter	Direction	Size	Description
segid	in	string	A segmentation ID for delegation.
reason	in	string	The reason for the delegation.
delegable	in	int	1 for delegable, otherwise not.
acceptneed	in	int	1 for acceptance needed, otherwise not.
startdate	in	string	Take effect as of this date, in UTC, ISO format.
enddate	in	string	Stop delegating as of this date, in UTC, ISO format. This is only valid for ALL type delegation.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.287 WFPDRSubmit (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

An all-in-one api function call that can finish all the steps all together from login to submit. It creates a new workflow request and then submit the request for processing.

## Form of Request

```
<WFPDRSubmitRequest>
   <recipid>...</recipid>
   <recippass>...</recippass>
   <recipemail>...</recipemail>
   <requesteremail>...</requesteremail>
   <requestreason>...</requestreason>
   <preqid>...</preqid>
   <reserveid>...</reserveid>
   <maqid>...</maqid>
   <parentbatchsig>...
   <serverid>...</serverid>
   <sessdat>...</sessdat>
   <input>...</input>
</WFPDRSubmitRequest>
<WFPDRSubmit_vectorInput>
   <attrkey>...</attrkey>
   <value>...</value>
</WFPDRSubmit_vectorInput>
```

#### Form of Response

#### **3.7.287.1 Parameters**

Parameter	Direction	Size	Description
recipid	in	string	The profile ID of the person whom this request is for.
recippass	in	string	The initial password for the recipient's account on specified target. Used by ACUA.
recipemail	in	string	The email for the recipient.
requesteremail	in	string	The email of the requester.
requestreason	in	string	The reason for this request.
preqid	in	string	Required pre-defined request ID to base this new request on.
reserveid	in	string	Optional reservation ID returned by ReserveAccountId, ReserveAttrValue, or ReserveProfileId.
maqid	in	string	The ID of the account set.
parentbatchsig	in	string	Optional ID identifying the parent request.
serverid	in	string	Optional server ID to process the request on. Empty serverid means to run the request locally, or the special string "RANDOM" can be supplied to allow selection of a random server.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attrs_vectorInput
attrkey	in	string	The key of the value to be used in operations.
value	in	string	The value for action/to update. Values for multi-value should be specified across a series of key/value pairs.
errmsg	out	string	A message describing the error or success resulting from the API call.
			parameters continued on next page

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFPDRSubmit_vectorOutput
batchsig	out	string	The ID identifying the batch.
serverid	out	string	Server ID that will process the request.

# 3.7.288 WFReject (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Denies the specified batch for the logged-in user.

#### Form of Request

#### Form of Response

# **3.7.288.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reason	in	string	The reason for the denial.
primary	in	string	The profile ID of the user on whose behalf this is being done. If blank, then delegation is not used.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.289 WFRequestActionAuthorGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieves all of the authorizers and implementers associated with the given request action. Results will differ over time as the authorizers and implementers can change with dynamic authorization or as they approve/deny/accept/complete requests.

WFRequestActionAuthorGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

# Form of Response

```
<WFRequestActionAuthorGetResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</WFRequestActionAuthorGetResponse>
<WFRequestActionAuthorGet_vectorOutput>
    <author>...</author>
    <phase>...</phase>
    <authorizeType>...</authorizeType>
    <notes>...</notes>
    <status>...</status>
    <authnote>...</authnote>
    <tmstart>...</tmstart>
</WFRequestActionAuthorGet_vectorOutput>
```

#### **3.7.289.1 Parameters**

Parameter	Direction	Size	Description	
batchsig	in	string	The request ID.	

Parameter	Direction	Size	Description
reqacctsig	in	string	The action ID.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestActionAuthorGet_vectorOutput
author	out	string	The profile ID of the authorizer.
phase	out	int	Phase in which the authorizer will be asked to respond.
authorizeType	out	string	The type of the request. A is approve creation of the account, M is assign authorizers.
notes	out	string	An explanation, if any, for the status of the action.
status	out	string	The status code of the action.
authnote	out	string	The note provided by authmod
tmstart	out	string	The ISO-formatted UTC time the authorizer was first assigned to this request action.

# 3.7.290 WFRequestActionsGenericSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Sets the generic actions associated with the given request.

```
Form of Request
```

```
<WFRequestActionsGenericSetRequest>
    <batchsig>...</patchsig>
    <sessionid>...</sessionid>
    <serverid>...</serverid>
    <sessdat>...</sessdat>
    <input>...</input>
</WFRequestActionsGenericSetRequest>
<WFRequestActionsGenericSet vectorInput>
    <operationType>...
    <metaobjnew>...</metaobjnew>
    <metaobjtype>...</metaobjtype>
    <metaobjname>...</metaobjname>
    <childmetaobjnew>...</childmetaobjnew>
    <childmetaobjtype>...</childmetaobjtype>
    <childmetaobjname>...</childmetaobjname>
    <targetobjnew>...</targetobjnew>
    <targetobjtype>...</targetobjtype>
    <targetobjname>...</targetobjname>
    <targetobjhostid>...</targetobjhostid>
    <childtargetobjnew>...</childtargetobjnew>
    <childtargetobjtype>...</childtargetobjtype>
    <childtargetobjname>...</childtargetobjname>
    <childtargetobjhostid>...</childtargetobjhostid>
    <reltype>...</reltype>
    <newid>...</newid>
    <reason>...</reason>
</WFRequestActionsGenericSet_vectorInput>
```

#### Form of Response

#### **3.7.290.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the in-progress request.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of operations_vectorInput
operationType	in	string	The type of operation. This is one of the types returned by WFRequestOperationTypes.
metaobjnew	in	int	Whether the meta object that is the only or the one that is considered the parent object for metaobj-related operations will be created or references a meta object that will be created in this request.
metaobjtype	in	string	Type of the (potentially new) meta object that is the only or the one that is considered the parent object for metaobj-related operations.
metaobjname	in	string	The name (at the time of the request) of the (potentially new) meta object that is the only or the one that is considered the parent object for metaobj-related operations.
childmetaobjnew	in	int	Whether the meta object that is considered the child object for metaobj-related relational operations exists or references a meta object that will be created in this request.
childmetaobjtype	in	string	Type of the (potentially new) meta object that is considered the child object for metaobj-related relational operations.
childmetaobjnam	<i>e</i> in	string	The name (at the time of the request) of the (potentially new) meta object that is considered the child object for metaobj-related relational operations.
			parameters continued on next page

Parameter	Direction	Size	Description
targetobjnew	in	int	Whether the target object that is the only or the one that is considered the parent object for targetobj-related operations will be created or references a target object that will be created in this request.
targetobjtype	in	string	Type of the (potentially new) target object that is the only or the one that is considered the parent object for targetobj-related operations.
targetobjname	in	string	The name (at the time of the request) of the target object that is the only or the one that is considered the parent object for targetobj-related operations.
targetobjhostid	in	string	The target identifier of the (potentially new) target object that is the only or the one that is considered the parent object for targetobj-related operations.
childtargetobjnew	in	int	Whether the target object that is considered the child object for targetobj-related relational operations exists or references a target object that will be created in this request.
childtargetobjtype	in	string	Type of the (potentially new) target object that is considered the child object for targetobj-related relational operations.
childtargetobjnam	<i>e</i> in	string	The name (at the time of the request) of the (potentially new) target object that is considered the child object for targetobj-related relational operations.
childtargetobjhost	<i>id</i> h	string	The target identifier of the (potentially new) target object that is considered the child object for targetobj-related relational operations.
reltype	in	string	The relation between the meta/target objects for this operation.
newid	in	string	The new ID used by the OBJ_RENAME operation.
			parameters continued on next page

Parameter	Direction	Size	Description
reason	in	string	(optional) The reason for the action. Used by all action types.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.291 WFRequestActionsGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieves the actions associated with the given request.

WFRequestActionsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

```
Form of Response
<WFRequestActionsGetResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</WFRequestActionsGetResponse>
<WFRequestActionsGet vectorOutput>
    <operationType>...</operationType>
    <regacctsig>...</regacctsig>
    <acctid>...</acctid>
    <newid>...</newid>
    <acctidset>...</acctidset>
    <recippass>...</recippass>
    <dstuserid>...</dstuserid>
    <newgroup>...</newgroup>
    <groupid>...
    <childgroupid>...</childgroupid>
    <newchildgroup>...</newchildgroup>
    <newchildgroupid>...
    <newchildgrouptargetid>...</newchildgrouptargetid>
    <grpname>...</grpname>
    <grpquid>...
    <targetid>...</targetid>
    <childtargetid>...</childtargetid>
    <objectname>...</objectname>
    <objecttype>...</objecttype>
    <objsecuritydomain>.../objsecuritydomain>
    <newctx>...</newctx>
    <parentrole>...</parentrole>
    <reason>...</reason>
    <resmemberid>...</resmemberid>
```

```
<roleid>...</roleid>
    <sodid>...</sodid>
    <srcuserid>...
    <tplid>...</tplid>
    <tpluri>...</tpluri>
    <userid>...</userid>
    <resourceaddress>...</resourceaddress>
    <resourcetype>...</resourcetype>
    <result>...</result>
    <status>...</status>
    <authnote>...</authnote>
    <authtype>...</authtype>
    <bbtag>...</bbtag>
    <metaobjnew>...</metaobjnew>
    <metaobjtype>...</metaobjtype>
    <metaobjname>...</metaobjname>
    <childmetaobjnew>...</childmetaobjnew>
    <childmetaobjtype>...</childmetaobjtype>
    <childmetaobjname>...</childmetaobjname>
    <targetobjnew>...</targetobjnew>
    <targetobjtype>...</targetobjtype>
    <targetobjname>...</targetobjname>
    <targetobjhostid>...</targetobjhostid>
    <childtargetobjnew>...</childtargetobjnew>
    <childtargetobjtype>...</childtargetobjtype>
    <childtargetobjname>...</childtargetobjname>
    <childtargetobjhostid>...</childtargetobjhostid>
    <reltype>...</reltype>
    <checkoutid>...</checkoutid>
</WFRequestActionsGet_vectorOutput>
```

#### 3.7.291.1 Parameters

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Get the request as it exists in the given session. This is useful when a request is actively being created (or modified) but the user has not yet committed their changes and the API must get the information about the request as it is being changed. If this is empty, or if an actively changed request is not found in the given session, the request will be extracted as it exists currently.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestActionsGet_vectorOutput
operationType	out	string	The type of operation. This is one of the types returned by WFRequestOperationTypes.
reqacctsig	out	string	The action ID.
acctid	out	string	The account ID on the target. Used by the ARCHREQPWD, CFYA, CFYG, DELU, DNAU, ENAU, GRUA, GROA, GROD, GRUD, MVCU, RENU, LUPD, LDEL, and UPDT action types.
newid	out	string	The new ID used by the RENU, RPRO action types.
acctidset	out	int	Whether the account ID that will be affected has been determined explicitly. Used by the ACUA action type.
recippass	out	string	The initial password for the recipient's account on specified target.

Parameter	Direction	Size	Description
dstuserid	out	string	The profile ID of a destination user. Used by the CFYR, ORGTFRSUB and ORGTFRSUBPULL action types.
newgroup	out	int	If equal to 1, the group membership adding operation is based on a to-be-created group using CRTG. Used by the GRUA action type.
groupid	out	string	The ID of a managed group on the target. Used by the CFYG, CRTG, GROA, GROD, GRUA, and GRUD action types.
childgroupid	out	string	The ID of a child managed group on the target. Used by the GRGA, GRGD action types.
newchildgroup	out	int	If equal to 1, the child group is a new group that will be created in this request.
newchildgroupid	out	string	The ID of a child managed group on the target. Used by the GRGA, GOGA action types. Only set if newchildgroup is 1.
newchildgrouptar	geetid	string	The ID of a child managed group on the target. Used by the GRGA, GOGA action types. Only set if newchildgroup is 1.
grpname	out	string	The name of a managed group on the target. Only used by the CRTG action type.
grpguid	out	string	The guid of a managed group on the target. Only used by the DELG action type.
targetid	out	string	The ID of a target. Used by the ARCHREQPWD, CFYA, CFYG, DELU, DNAU, ENAU, GROA, GROD, GRUA, GRUD, MVCU, RENU, LUPD, LDEL, UPDT and GRDB action types.
childtargetid	out	string	The ID of the target of childgroupid. Used by GRGA and GRGD action types.

Parameter	Direction	Size	Description
objectname	out	string	Name of unknown object member of group, used by GRBD operation.
objecttype	out	string	Type of unknown object member of group, used by GRBD operation.
objsecuritydomain	out	string	Security domain of unknown object member of group, used by GRBD operation.
newctx	out	string	The value of the new context. Used by the MVCU action type.
parentrole	out	string	The ID of a parent role. Used by the ACUA, RLUA, DELR, GRUA, ADDM, DELM action types.
reason	out	string	The reason for the action. Used by all action types.
resmemberid	out	string	The ID of a resource member. Used by the AEDEFICIT action type.
roleid	out	string	The ID of a role. Used by the CFYAEDEF, CFYR, RLUA, DELR, and GRUA action types.
sodid	out	string	The ID of an SOD rule. Used by the AESOD action type.
srcuserid	out	string	The profile ID of a source user. Used by the ORGTFRSUB and ORGTFRSUBPULL action type.
tplid	out	string	The ID of a template. Used by the ACUA, GRUA, and DELU action types.
tpluri	out	string	The URI template. Used by NRCR, NRUP, NRDL, NRMV action types.
userid	out	string	The profile ID of a user. Used by the CFYU, DELR, ORGADDMGR, ORGADDSUB, ORGDELMGR, ORGDELSUB, ORGTFRSUBPULL, LUPD, and RENU action types.

Parameter	Direction	Size	Description
resourceaddress	out	string	The resource address. Used by NRCR, NRUP, NRDL, NRMV action types.
resourcetype	out	string	The resource type. Used by NRCR, NRUP, NRDL, NRMV action types.
result	out	string	The result of operation.
status	out	string	The status of operation.
authnote	out	string	The note provided by authmod
authtype	out	string	The authentication type. Either phased or parallel.
bbtag	out	string	The value of the tag to use for replacement in blackboard rules.
metaobjnew	out	int	Whether the meta object that is the only or the one that is considered the parent object for metaobj-related operations will be created or references a meta object that will be created in this request.
metaobjtype	out	string	Type of the (potentially new) meta object that is the only or the one that is considered the parent object for metaobj-related operations.
metaobjname	out	string	The name (at the time of the request) of the (potentially new) meta object that is the only or the one that is considered the parent object for metaobj-related operations.
childmetaobjnew	out	int	Whether the meta object that is considered the child object for metaobj-related relational operations exists or references a meta object that will be created in this request.
childmetaobjtype	out	string	Type of the (potentially new) meta object that is considered the child object for metaobj-related relational operations.

Parameter	Direction	Size	Description
childmetaobjname	out	string	The name (at the time of the request) of the (potentially new) meta object that is considered the child object for metaobj-related relational operations.
targetobjnew	out	int	Whether the target object that is the only or the one that is considered the parent object for targetobj-related operations will be created or references a target object that will be created in this request.
targetobjtype	out	string	Type of the (potentially new) target object that is the only or the one that is considered the parent object for targetobj-related operations.
targetobjname	out	string	The name (at the time of the request) of the target object that is the only or the one that is considered the parent object for targetobj-related operations.
targetobjhostid	out	string	The target identifier of the (potentially new) target object that is the only or the one that is considered the parent object for targetobj-related operations.
childtargetobjnew	out	int	Whether the target object that is considered the child object for targetobj-related relational operations exists or references a target object that will be created in this request.
childtargetobjtype	out	string	Type of the (potentially new) target object that is considered the child object for targetobj-related relational operations.
childtargetobjnam	<i>e</i> out	string	The name (at the time of the request) of the (potentially new) target object that is considered the child object for targetobj-related relational operations.
childtargetobjhost	<i>id</i> but	string	The target identifier of the (potentially new) target object that is considered the child object for targetobj-related relational operations.
reltype	out	string	The relation between the meta/target objects for this operation.

Parameter	Direction	Size	Description	
checkoutid	out	string	Check-out id.	

# 3.7.292 WFRequestActionsSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Sets the actions associated with the given request.

### Form of Request

```
<WFRequestActionsSetRequest>
   <batchsig>...</patchsig>
   <sessionid>...</sessionid>
   <serverid>...</serverid>
   <sessdat>...</sessdat>
   <input>...</input>
</WFRequestActionsSetRequest>
<WFRequestActionsSet vectorInput>
   <operationType>...</operationType>
   <acctid>...</acctid>
   <acctidset>...</acctidset>
   <recippass>...</recippass>
   <dstuserid>...</dstuserid>
   <newgroup>...</newgroup>
   <groupid>...
   <grpname>...
   <grpquid>...
   <childgroupid>...</childgroupid>
   <newchildgroup>...</newchildgroup>
   <newchildgroupid>...
   <newchildgrouptargetid>...</newchildgrouptargetid>
   <targetid>...</targetid>
   <childtargetid>...</childtargetid>
   <objectname>...</objectname>
   <objecttype>...</objecttype>
   <accthostid>...</accthostid>
   <gsetid>...</gsetid>
   <policyid>...</policyid>
   <newctx>...</newctx>
   <parentrole>...</parentrole>
   <reason>...</reason>
   <resmemberid>...</resmemberid>
   <roleid>...</roleid>
   <sodid>...</sodid>
   <expdate>...</expdate>
   <srcuserid>...
   <newid>...</newid>
   <tplid>...</tplid>
   <tpluri>...</tpluri>
   <userid>...</userid>
   <resourceaddress>...</resourceaddress>
   <resourcetype>...</resourcetype>
```

## Form of Response

## **3.7.292.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the in-progress request.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of operations_vectorInput
operationType	in	string	The type of operation. This is one of the types returned by WFRequestOperationTypes.
acctid	in	string	The account ID on the target. Used by the ARCHREQPWD, ARCHREQGRP, DELU, DNAU, ENAU, GRUA, GROA, GROD, GRUD, LDEL, LUPD, MVCU, RENU, and UPDT action types.
acctidset	in	int	Whether the account ID that will be affected has been determined explicitly. Used by the ACUA action type.
recippass	in	string	The initial password for the recipient's account on specified target. Used by ACUA.

Parameter	Direction	Size	Description
dstuserid	in	string	The ID of a destination user. Used by the ORGTFRSUB and ORGTFRSUBPULL action type.
newgroup	in	int	If equals to 1, the group membership adding operation is based on a to-be-created group using CRTG. Used by the GRUA action type.
groupid	in	string	The ID of a managed group on the target. Used by the GROA, GROD, GRUA, GRUD, GRGA, GRGD, CRTG, DELG, AEDEF, AEDEFDEL, AESUR, AESURDEL, AESOD and GRBD action types.
grpname	in	string	The name of a managed group on the target. Only used by the CRTG action type.
grpguid	in	string	The guid of a managed group on the target. Only used by the DELG action type.
childgroupid	in	string	The ID of a child managed group on the target. Used by the GRGA, GRGD action types.
newchildgroup	in	int	If equal to 1, the child group is a new group that will be created in this request.
newchildgroupid	in	string	The ID of a child managed group on the target. Used by the GRGA, GOGA action types. Only set if newchildgroup is 1.
newchildgrouptar	gėnid	string	The ID of a child managed group on the target. Used by the GRGA, GOGA action types. Only set if newchildgroup is 1.
targetid	in	string	The ID of a target. Used by the ARCHREQPWD, ARCHREQGRP, DELU, DNAU, ENAU, GROA, GROD, GRUA, GRUD, GRGA, GRGD, CRTG, DELG, LDEL, LUPD, MVCU, RENU, UPDT, AEDEF, AEDEFDEL, AESUR, AESURDEL, and AESOD action types.
childtargetid	in	string	The ID of the target of childgroupid. Used by GRGA and GRGD action types.

Parameter	Direction	Size	Description
objectname	in	string	Name of object loaded from group, used by GRBD operation.
objecttype	in	string	Type of object loaded from group, used by GRBD operation.
accthostid	in	string	Target system ID to perform lookups for the account to apply temporary group permissions. Used by the ARCHREQGRP action.
gsetid	in	string	The ID of the group set. Used by the ARCHREQGRP action.
policyid	in	string	The ID of the policy for temporary group access request. Used by the ARCHREQGRP action.
newctx	in	string	The value of the new context. Used by the MVCU action type.
parentrole	in	string	(optional) The ID of a parent role. Used by the ACUA, RLUA, DELR, GRUA, and GRGA action types.
reason	in	string	(optional) The reason for the action. Used by all action types.
resmemberid	in	string	The ID of a resource member. Used by the AEDEFICIT action type.
roleid	in	string	The ID of a role. Used by the RLUA, DELR, GRUA, AEDEF, and AEDEFDEL action types. Can be used together with tplid only for the AEDEF and AEDEFDEL action types.
sodid	in	string	The ID of an SOD rule. Used by the AESOD action type.
expdate	in	string	The ISO-formatted UTC expiry date, only applicable for AESOD and AESOD_EXTEND operations.
srcuserid	in	string	The profile ID of a source user. Used by the ORGTFRSUB and ORGTFRSUBPULL action type.

Parameter	Direction	Size	Description
newid	in	string	The new ID used by the RENU, RPRO action types.
tplid	in	string	The ID of a template. Used by the ACUA, DELU, GRUA, GRGA, AEDEF, AEDEFDEL, AESUR, AESURDEL, and AESOD action types. Can be used together with roleid only for the AEDEF and AEDEFDEL action types. Optional for the GRUA action type.
tpluri	in	string	The URI template. Used by NRCR, NRUP, NRDL, NRMV action types.
userid	in	string	The profile ID of a user. Used by the ENAP, DNAP, DELR, LUPD, RPRO, ORGADDMGR, ORGADDSUB, ORGDELMGR, ORGDELSUB, ORGTFRSUB, ORGTFRSUBPULL, and RENU action types.
resourceaddress	in	string	The resource address. Used by NRCR, NRUP, NRDL, NRMV action types.
resourcetype	in	string	The resource type. Used by NRCR, NRUP, NRDL, NRMV, CRTC, DELC, UPCO, ADDM, DELM action types.
checkoutid	in	string	Check-out id.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.293 WFRequestAttrActionsPopulate (*Bravura Identity*)

Adds request actions for affected target/account attributes of the given request. Assumes the profile attributes to update are already populated into the request.

## Form of Request

### Form of Response

## **3.7.293.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the in-progress request.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.294 WFRequestAttrsGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieves the request attributes of the recipient of the given request.

WFRequestAttrsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

## **3.7.294.1 Parameters**

Parameter	Direction	Size	Description	
batchsig	in	string	The ID identifying the batch.	
batchisig	""	String	The ID Identifying the batch.	

Parameter	Direction	Size	Description
sessionid	in	string	Get the request as it exists in the given session. This is useful when a request is actively being created (or modified) but the user has not yet committed their changes and the API must get the information about the request as it is being changed. If this is empty, or if an actively changed request is not found in the given session, the request will be extracted as it exists currently.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestAttrsGet_vectorOutput
name	out	string	The name of the request attribute.
value	out	string	The value of the attribute. Each value of a multi-value attribute is specified in its own name/value pair.
attributeType	out	string	The type of entity this describes: Profile(P), Request-only(R), Resource(E).
reqacctsig	out	string	The action ID if this is a resource attribute

# 3.7.295 WFRequestAttrsSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Sets the request attributes of the recipient of the given request.

#### Form of Request

## Form of Response

### **3.7.295.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the in-progress
Cocciona		String	request.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
includeRedunda	<i>ant</i> in	int	1 for including redundant attributes, otherwise not.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of attributes_vectorInput
name	in	string	The name of the request attribute.
value	in	string	The value of the attribute.
value		String	The value of the attribute.
reqacctsig	in	string	Optional: The action ID to set entity attributes to.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.296 WFRequestAuthinfoGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieve the authorization information about a request.

WFRequestAuthinfoGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

## Form of Response

### **3.7.296.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reqacctsig	in	string	The action ID.

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestAuthinfoGet_vectorOutput
reqacctsig	out	string	The action ID.
phase	out	int	The phase of authorization.
nauthreq	out	int	Number of approvals required.
nauthrecv	out	int	Number of approvals received.
nrejreq	out	int	Number of denials required.
nrejrecv	out	int	Number of denials received.

# 3.7.297 WFRequestAuthorizerOpenFind (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Lists the open requests where the specified user is an authorizer and they still require input.

WFRequestAuthorizerOpenFind streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

#### Form of Response

### **3.7.297.1 Parameters**

Parameter	Direction	Size	Description
authorizer	in	string	The ID of the authorizer.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestAuthorizerOpenFind_vectorOutput
batchsig	out	string	The sighkey of the batch.
isdelegate	out	int	Return 1 if this is a delegated certification, 0 if otherwise.

# 3.7.298 WFRequestCancel (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Cancels the given request.

### Form of Request

### Form of Response

## **3.7.298.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reqid	in	string	The profile ID of the requester or recipient of the request.
reason	in	string	The reason for cancelling the request.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.

# 3.7.299 WFRequestCertifierOpenFind (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*)

Lists the open segments where the specified user is a reviewer and they still require input.

WFRequestCertifierOpenFind streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

#### Form of Response

### **3.7.299.1 Parameters**

Parameter	Direction	Size	Description
certifier	in	string	The ID of the authorizer.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestCertifierOpenFind_vectorOutput
segsig	out	string	The sighkey of the segment.
isdelegate	out	int	Return 1 if this is a delegated certification, 0 if otherwise.

# 3.7.300 WFRequestCheckin (Bravura Privilege)

Check in all passwords requested in a batch, if they have been checked out.

WFRequestCheckin streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

## Form of Response

### **3.7.300.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for which all requested passwords are to be checked in.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
			parameters continued on next page

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestCheckin_vectorOutput
status	out	int	The status of this password checkin.
acctid	out	string	The account ID for this checkin attempt.
wstnid	out	string	The workstation ID for this checkin attempt.
errmsg	out	string	The error message for this checkin attempt.

# 3.7.301 WFRequestCheckout (*Bravura Privilege*)

Check out all passwords requested in a batch, if the request has been approved.

WFRequestCheckout streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

### **3.7.301.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for which all requested passwords are to be checked out.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestCheckout_vectorOutput
status	out	int	The status of this password checkout.
acctid	out	string	The account ID for this checkout attempt.
wstnid	out	string	The workstation ID for this checkout attempt.
errmsg	out	string	The error message for this checkout attempt.
password	out	string	The password for this account, if the checkout was successful.
checkoutid	out	string	Check-out id.

# 3.7.302 WFRequestCreate (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Creates a new workflow request. Call WFRequestSubmit to submit the request for processing.

#### Form of Request

```
<WFRequestCreateRequest>
   <recipid>...</recipid>
   <recipemail>...</recipemail>
   <requesteremail>...</requesteremail>
   <requestreason>...</requestreason>
   <preqid>...</preqid>
   <reserveid>...</reserveid>
   <maqid>...</maqid>
   <parentbatchsig>...
   <serverid>...</serverid>
   <userdesc>...</userdesc>
   <sessdat>...</sessdat>
   <input>...</input>
</WFRequestCreateRequest>
<WFRequestCreate_vectorInput>
   <role>...</role>
   <nosqroupname>...</nosqroupname>
   <nosgrouphostid>.../nosgrouphostid>
   <subgrpname>...</subgrpname>
   <subgrphostid>...</subgrphostid>
   <accountname>...</accountname>
   <accounthostid>...</accounthostid>
   <resourcehostid>...</resourcehostid>
   <resourceaddress>...</resourceaddress>
   <resqroupid>...</resqroupid>
   filename>...
</WFRequestCreate_vectorInput>
```

#### Form of Response

# **3.7.302.1 Parameters**

Parameter	Direction	Size	Description
recipid	in	string	The profile ID of the person whom this request is for.
recipemail	in	string	The email for the recipient.
requesteremail	in	string	The email of the requester.
requestreason	in	string	The reason for this request.
preqid	in	string	Optional pre-defined request ID to base this new request on. If specified, the new request will be initialized with attributes and required actions configured on the pre-defined request.
reserveid	in	string	Optional reservation ID returned by ReserveAccountId, ReserveAttrValue, or ReserveProfileId.
maqid	in	string	The ID of the account set.
parentbatchsig	in	string	Optional ID identifying the parent request.
serverid	in	string	Optional server ID to process the request on. Empty serverid means to run the request locally, or the special string "RANDOM" can be supplied to allow selection of a random server.
userdesc	in	string	(Used for privileged access requests) The description for the request which can be edited by the user before submitting the request. Use the same value for this as for the request attribute with name "DESC_APP" set with WFRequestAttrsSet.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of topics_vectorInput
role	in	string	Apply the role-type operations to this topic role.
			parameters continued on next page

Parameter	Direction	Size	Description
nosgroupname	in	string	Apply the nosgroup-type operations to this topic group.
nosgrouphostid	in	string	Apply the nosgroup-type operations to this topic group.
subgrpname	in	string	Apply the nosgroup-type operations to this topic sub/child group.
subgrphostid	in	string	Apply the nosgroup-type operations to this topic sub/child group.
accountname	in	string	Apply the account-type operations to this topic account.
accounthostid	in	string	Apply the account-type operations to this topic account.
resourcehostid	in	string	Apply the resource-type operations to this topic resource.
resourceaddress	in	string	Apply the resource-type operations to this topic resource.
resgroupid	in	string	Apply the resource-type operations to this topic resource.
orofilename	in	string	Apply the profile-type operations to this topic profile.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestCreate_vectorOutput
batchsig	out	string	The ID identifying the batch.

Parameter	Direction	Size	Description
sessionid	out	string	Identifier for the session that contains the in-progress request.
serverid	out	string	Server ID that will process the request.

# 3.7.303 WFRequestFind (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieves all of the requests associated with the given search attribute values. If no search attributes are provided, then all requests are returned. Ranged searches are supported only for date-based search attributes.

WFRequestFind streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

#### Form of Response

```
<WFRequestFindResponse>
   <errmsg>...</errmsg>
   <handle>...</handle>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...</output>
</WFRequestFindResponse>
<WFRequestFind_vectorOutput>
   <batchsig>...</patchsig>
   <batchname>...
   <status>...</status>
   <prevstatus>...</prevstatus>
   <recipid>...</recipid>
   <recipemail>...</recipemail>
   <requesterid>...</requesterid>
   <requesteremail>...</requesteremail>
   <notes>...</notes>
   <regadmin>...</regadmin>
   <sessionid>...</sessionid>
   <entrydate>...
   <lastauth>...
   <reason>...</reason>
   <canceledby>...</canceledby>
```

### **3.7.303.1 Parameters**

Parameter	Direction	Size	Description
options	in	string	(Optional) Additional parameters, as key-value pairs in bare KVG format. Currently, these are the only supported parameters:
			<ul> <li>SortAttr = <attrname>: A search attribute, as returned by WFRequestFindAttrs, by which to sort the requests returned by WFRequestFind. By default, requests will be sorted by entrydate.</attrname></li> </ul>
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of criteria_vectorInput
name	in	string	The name of the search attribute. This is one of the attributes returned by WFRequestFindAttrs.
value1	in	string	The value of the search attribute. If value2 is used, then value1 is the minimum of a range of values for the search attribute.

Parameter	Direction	Size	Description
value2	in	string	The maximum of a range of values for the search attribute. This is ignored if value1 is not used.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestFind_vectorOutput
batchsig	out	string	The ID identifying the batch.
batchname	out	string	Human-readable description of request
status	out	string	The status code of the request.
prevstatus	out	string	The previous status code of the request before it went on hold.
recipid	out	string	The profile ID for the recipient of the request.
recipemail	out	string	The email for the recipient.
requesterid	out	string	The profile ID of the requester.
requesteremail	out	string	The email of the requester.
notes	out	string	The reason for this request.
reqadmin	out	string	(DEPRECATED) The ID of the console user who submitted the request. This will be used if the request is submitted by proxy.

Parameter	Direction	Size	Description
sessionid	out	string	The request's session Id
entrydate	out	string	When the request was last entered, in UTC, ISO format.
lastauth	out	string	The last authorized/deny event, in UTC, ISO format.
reason	out	string	Reasons entered by Hitachi ID Bravura Security Fabric
canceledby	out	string	The profile ID of the user who canceled the request.
canceleddate	out	string	Canceled date, in UTC, ISO format.
termdate	out	string	Termination date for this user, in UTC, ISO format.
startdate	out	string	Take effect as of this date, in UTC, ISO format.
segsig	out	string	Certification segment ID.
parentbatchsig	out	string	The ID identifying the parent batch.
superbatchsig	out	string	Parent batch.
autoressig	out	string	Request that caused this automatic assignment request to be created.
reserveid	out	string	Reservation ID for this batch.
delegate	out	string	Profile ID of the delegate of the requester that caused this request to be issued.
location	out	string	Location.
accttype	out	string	Account type.
preqid	out	string	Pre-defined request used.

# 3.7.304 WFRequestFindAttrs (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Returns a list of search attributes supported by WFRequestFind.

WFRequestFindAttrs streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

### Form of Request

### Form of Response

### **3.7.304.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestFindAttrs_vectorOutput
name	out	string	The search attribute.
description	out	string	The description of the search attribute.

# 3.7.305 WFRequestFindByProfileAttr (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieves all of the requests associated with the given profile attribute values. At least one search attribute with one search value is required. Up to five search attributes are allowed; any search attributes specified beyond the first five will be ignored. If a profile attribute is specified more than once, then the search value(s) for the last specified one will be used.

WFRequestFindByProfileAttr streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

#### Form of Response

```
<WFRequestFindByProfileAttrResponse>
   <errmsq>...</errmsq>
   <handle>...</handle>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...</output>
</WFRequestFindByProfileAttrResponse>
<WFRequestFindByProfileAttr_vectorOutput>
   <batchsig>...</patchsig>
   <batchname>...
   <status>...</status>
   <prevstatus>...</prevstatus>
   <recipid>...</recipid>
   <recipemail>...</recipemail>
   <requesterid>...</requesterid>
   <requesteremail>...</requesteremail>
   <notes>...</notes>
   <regadmin>...</regadmin>
   <sessionid>...</sessionid>
   <entrydate>...
   <lastauth>...
   <reason>...</reason>
   <canceledby>...</canceledby>
```

## **3.7.305.1 Parameters**

Direction	Size	Description
in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
in	string	The session handle from the previous API call.
in	array	An array of criteria_vectorInput
in	string	The profile attribute ID.
in	string	The value of the profile attribute. If value2 is used, then value1 is the minimum of a range of values for the search attribute.
in	string	The maximum of a range of values for the search attribute.
out	string	A message describing the error or success resulting from the API call.
out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
	in in in in in out	in string in string in array in string in string out string

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestFindByProfileAttr_vectorOutput
batchsig	out	string	The ID identifying the batch.
batchname	out	string	Human-readable description of request
status	out	string	The status code of the request.
prevstatus	out	string	The previous status code of the request before it went on hold.
recipid	out	string	The profile ID for the recipient of the request.
recipemail	out	string	The email for the recipient.
requesterid	out	string	The profile ID of the requester.
requesteremail	out	string	The email of the requester.
notes	out	string	The reason for this request.
reqadmin	out	string	(DEPRECATED) The ID of the console user who submitted the request. This will be used if the request is submitted by proxy.
sessionid	out	string	The request's session Id.
entrydate	out	string	When the request was last entered, in UTC, ISO format.
lastauth	out	string	The last authorized/deny event in UTC, ISO format.
reason	out	string	Reasons entered by Hitachi ID Bravura Security Fabric

... parameters continued on next page

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Parameter	Direction	Size	Description
canceledby	out	string	The profile ID of the user who canceled the request.
canceleddate	out	string	Canceled date, in UTC, ISO format.
termdate	out	string	Termination date for this user, in UTC, ISO format.
startdate	out	string	Take effect as of this date, in UTC, ISO format.
segsig	out	string	Certification segment ID.
parentbatchsig	out	string	The ID identifying the parent batch.
superbatchsig	out	string	Parent batch
autoressig	out	string	Request that caused this automatic assignment request to be created.
reserveid	out	string	Reservation ID for this batch.
delegate	out	string	Profile ID of the delegate of the requester that caused this request to be issued.
location	out	string	Location.
accttype	out	string	Account type.
preqid	out	string	Pre-defined request used.

# 3.7.306 WFRequestGSetCheckin (*Bravura Privilege*)

Check in group memberships requested in a batch, if they have been checked out.

WFRequestGSetCheckin streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

```
<WFRequestGSetCheckinResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</WFRequestGSetCheckinResponse>
<WFRequestGSetCheckin_vectorOutput>
    <status>...</status>
    <userid>...</userid>
    <acctid>...</acctid>
    <targetid>...</targetid>
    <policyid>...</policyid>
    <gsetid>...</gsetid>
    <errmsq>...</errmsq>
</WFRequestGSetCheckin_vectorOutput>
```

#### **3.7.306.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for which all requested group memberships are to be checked out.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	atrina	The accessor handle from the provious API cell
sessual	Ш	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestGSetCheckin_vectorOutput
status	out	int	The status of this group set checkin.
userid	out	string	The profile ID of a user.
acctid	out	string	The account ID for this checkin attempt.
targetid	out	string	The managed system ID for this checkin attempt.
policyid	out	string	The ID of the policy of the group set.
gsetid	out	string	The ID of the group set.
errmsg	out	string	The error message for this checkin attempt.

# 3.7.307 WFRequestGSetCheckout (Bravura Privilege)

Check out group memberships requested in a batch, if the request has been approved.

WFRequestGSetCheckout streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

```
<WFRequestGSetCheckoutResponse>
    <errmsq>...</errmsq>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...
</WFRequestGSetCheckoutResponse>
<WFRequestGSetCheckout_vectorOutput>
    <status>...</status>
    <userid>...</userid>
    <acctid>...</acctid>
    <targetid>...</targetid>
    <policyid>...</policyid>
    <gsetid>...</gsetid>
    <errmsg>...</errmsg>
    <checkoutid>...</checkoutid>
</WFRequestGSetCheckout_vectorOutput>
```

## **3.7.307.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for which all requested group memberships are to be checked out.

... parameters continued on next page

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Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestGSetCheckout_vectorOutput
status	out	int	The status of this group set checkout.
userid	out	string	The profile ID of a user.
acctid	out	string	The account ID for this checkout attempt.
targetid	out	string	The managed system ID for this checkout attempt.
policyid	out	string	The ID of the policy of the group set.
gsetid	out	string	The ID of the group set.
errmsg	out	string	The error message for this checkout attempt.
checkoutid	out	string	Check-out id.

# 3.7.308 WFRequestGenericCheckin (*Bravura Privilege*)

Check in a generic access request. If this function returns ERR\_UNKNOWN, the error message may contain a translatable string with more details. TranslationGet can be used to translate the string.

## Form of Request

## Form of Response

#### **3.7.308.1 Parameters**

Parameter	Direction	Size	Description
checkoutid	in	string	A check-out ID to check in.
sessdat	in	string	The session handle from the previous API call.
errmsq	out	string	A message describing the error or success resulting
Ü		J	from the API call.
**		:	The vetous ende from the ADI cell
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
		-	

# 3.7.309 WFRequestGenericCheckout (Bravura Privilege)

Check out a generic access request. If this function returns ERR\_UNKNOWN, the error message may contain a translatable string with more details. TranslationGet can be used to translate the string.

#### Form of Request

#### Form of Response

## **3.7.309.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for an approved generic access request.
itemid	in	string	Reserved. Do not use.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of WFRequestGenericCheckout_vectorOutput
checkoutid	out	string	The ID of the check-out, if the function succeeded.

# 3.7.310 WFRequestGet (Bravura Identity, Bravura Privilege, Access Certifier, Bravura Group)

Retrieves the configuration of the given request.

#### Form of Request

```
<WFRequestGetRequest>
    <batchsig>...</patchsig>
    <sessionid>...</sessionid>
    <sessdat>...</sessdat>
</WFRequestGetRequest>
```

#### Form of Response

```
<WFRequestGetResponse>
   <errmsq>...</errmsq>
   <rc>...</rc>
   <sessdat>...</sessdat>
   <output>...
</WFRequestGetResponse>
<WFRequestGet_vectorOutput>
   <batchname>...</patchname>
   <recipid>...</recipid>
   <status>...</status>
   <recipemail>...</recipemail>
   <requesterid>...</requesterid>
   <requesteremail>...</requesteremail>
   <notes>...</notes>
   <prevstatus>...</prevstatus>
   <regadmin>...</regadmin>
   <sessionid>...</sessionid>
   <entrydate>...
   <lastauth>...
   <reason>...</reason>
   <authnote>...</authnote>
   <canceledby>.../canceledby>
   <canceleddate>...</canceleddate>
   <termdate>...</termdate>
   <startdate>...</startdate>
   <segsig>...</segsig>
   <parentbatchsig>...
   <superbatchsig>...</superbatchsig>
   <autoressig>...</autoressig>
   <reserveid>...</reserveid>
   <delegate>...</delegate>
   qid>...</preqid>
</WFRequestGet_vectorOutput>
```

# 3.7.310.1 Parameters

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Get the request as it exists in the given session. This is useful when a request is actively being created (or modified) but the user has not yet committed their changes and the API must get the information about the request as it is being changed. If this is empty, or if an actively changed request is not found in the given session, the request will be extracted as it exists currently.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestGet_vectorOutput
batchname	out	string	Human-readable description of request
recipid	out	string	The profile ID of the recipient.
status	out	string	The status code of the request.
recipemail	out	string	The email for the recipient.
requesterid	out	string	The profile ID of the requester.
requesteremail	out	string	The email of the requester.
notes	out	string	The reason for this request.

Parameter	Direction	Size	Description
prevstatus	out	string	The previous status code of the request before it went on hold.
reqadmin	out	string	(DEPRECATED) The ID of the console user that submitted the request. This will be used if the request is submitted by proxy.
sessionid	out	string	The request's session ID.
entrydate	out	string	When the request was last entered, in UTC, ISO format.
lastauth	out	string	The last authorized/deny event, in UTC, ISO format.
reason	out	string	Reasons entered by Hitachi ID Bravura Security Fabric.
authnote	out	string	The note provided by authmod
canceledby	out	string	The profile ID of the user who canceled the request.
canceleddate	out	string	Canceled date, in UTC, ISO format.
termdate	out	string	Termination date for this user, in UTC, ISO format.
startdate	out	string	Take effect as of this date, in UTC, ISO format.
segsig	out	string	Certification segment ID.
parentbatchsig	out	string	The ID identifying the parent batch.
superbatchsig	out	string	Parent batch.
autoressig	out	string	Request that caused this automatic assignment request to be created.
reserveid	out	string	Reservation ID for this batch.

Parameter	Direction	Size	Description
delegate	out	string	Profile ID of the delegate of the requester that caused this request to be issued.
preqid	out	string	ID of the request, if pre-defined.

# 3.7.311 WFRequestImplementerOpenFind (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Lists batch id, item id and authorizer status of the open requests where the specified user is an implementer and they still require input.

WFRequestImplementerOpenFind streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

#### **3.7.311.1 Parameters**

Parameter	Direction	Size	Description
implementer	in	string	The ID of the authorizer.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestImplementerOpenFind_vectorOutput
batchsig	out	string	The sighkey of the batch.
itemsig	out	string	The sighkey of the request action.
status	out	string	The status of the implementer for the request action.
isdelegate	out	int	Return 1 if this is a delegated certification, 0 if otherwise.

# 3.7.312 WFRequestMAQCheckin (*Bravura Privilege*)

Check in an account set requested in a batch, if it has been checked out.

## Form of Request

#### Form of Response

# **3.7.312.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for which an account set is to be checked in.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.313 WFRequestMAQCheckout (*Bravura Privilege*)

Check out an account set requested in a batch, if the request has been approved.

#### Form of Request

#### Form of Response

#### **3.7.313.1 Parameters**

Parameter	Direction	Size	Description
batchid	in	string	A request batch ID for which an account set is to be checked out.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.

Parameter	Direction	Size	Description
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestMAQCheckout_vectorOutput
status	out	int	The status of this account set checkout.
userid	out	string	The profile ID of a user.
acctid	out	string	The account ID for this checkout attempt.
wstnid	out	string	The managed system ID for this checkout attempt.
maqid	out	string	The ID of the account set.
password	out	string	The password for this account, if the checkout was successful.
checkoutid	out	string	Check-out id.

# 3.7.314 WFRequestOperationTypes (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Returns a list of allowed operation types for assignment to requests.

WFRequestOperationTypes streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

See Workflow Request Operations for the complete list of operation types returned by this function.

#### Form of Request

#### Form of Response

#### **3.7.314.1 Parameters**

Parameter	Direction	Size	Description
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestOperationTypes_vectorOutput
name	out	string	The name of the operation.
description	out	string	The description of the operation.

# 3.7.315 WFRequestPasswordPolicyGet (*Bravura Identity*)

Get the password policies and request item IDs involved in a specified request.

WFRequestPasswordPolicyGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

## **3.7.315.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch, given the batchid, return a list of strength rules along with template ids for adding new accounts in the request

Parameter	Direction	Size	Description
sessionid	in	string	Get the request as it exists in the given session. This is useful when a request is actively being created (or modified) but the user has not yet committed their changes and the API must get the information about the request as it is being changed. If this is empty, or if an actively changed request is not found in the given session, the request will be extracted as it exists currently.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestPasswordPolicyGet_vectorOutput
ppid	out	string	The ID of the password policy.
reqacctsig	out	string	The action ID.

# 3.7.316 WFRequestPasswordSet (*Bravura Identity*)

Set passwords for specified password policies in a particular request.

## Form of Request

#### Form of Response

## **3.7.316.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the in-progress request.
			·
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
			the request is running locally.
recippass	in	string	The initial password for the recipient's accounts, used
			when password is not specified in the policy, password pair below.
			1

Parameter	Direction	Size	Description
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of passwords_vectorInput
ppid	in	string	The ID of the password policy.
password	in	string	Password used for this password policy.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.317 WFRequestSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Configures the given request.

## Form of Request

#### Form of Response

#### **3.7.317.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the request, if the request has not been submitted yet.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
batchname	in	string	Human-readable description of request
recipid	in	string	The profile ID of the recipient.
recipemail	in	string	The email for the recipient.
			peremeters continued on payt page

Parameter	Direction	Size	Description
requesteremail	in	string	The email of the requester.
requestreason	in	string	The reason for this request.
reserveid	in	string	Optional reservation ID returned by ReserveAccountId, ReserveAttrValue, or ReserveProfileId.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.318 WFRequestStatus (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Returns the current status of a given request, including the status of any associated actions.

WFRequestStatus streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

#### Form of Response

```
<WFRequestStatusResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</WFRequestStatusResponse>
<WFRequestStatus_vectorOutput>
    <regstatus>...</regstatus>
    <reqreason>...</reqreason>
    <operationType>...</operationType>
    <reqacctsig>...</reqacctsig>
    <acctid>...</acctid>
    <newid>...</newid>
    <dstuserid>...</dstuserid>
    <groupid>...
    <targetid>...</targetid>
    <newctx>...</newctx>
    <statusreason>...</statusreason>
    <notes>...</notes>
    <parentrole>...</parentrole>
    <actreason>...</actreason>
    <resmemberid>...</resmemberid>
    <roleid>...</roleid>
    <sodid>...</sodid>
    <srcuserid>...
    <actstatus>...</actstatus>
    <tplid>...</tplid>
    <tpluri>...</tpluri>
    <userid>...</userid>
    <resourceaddress>...</resourceaddress>
    <resourcetype>...</resourcetype>
</WFRequestStatus_vectorOutput>
```

# 3.7.318.1 **Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestStatus_vectorOutput
reqstatus	out	string	The status code of the request.
reqreason	out	string	The reason, if any, for the status of the request.
operationType	out	string	This type of operation. This is one of the types returned by WFRequestOperationTypes.
reqacctsig	out	string	The action ID.
acctid	out	string	The account ID on the target. Used by the ARCHREQPWD, CFYA, CFYG, DELU, DNAU, ENAU, GRUA, GROA, GROD, GRUD, MVCU, RENU, LUPD, LDEL, and UPDT action types.

Parameter	Direction	Size	Description
newid	out	string	The new account ID used by the RENU, RPRO action types.
dstuserid	out	string	The profile ID of a destination user. Used by the CFYR, ORGTFRSUB and ORGTFRSUBPULL action types.
groupid	out	string	The ID of a managed group on the target. Used by the CFYG, GROA, GROD, GRUA, and GRUD action types.
targetid	out	string	The ID of a target. Used by the ARCHREQPWD, CFYA, CFYG, DELU, DNAU, ENAU, GROA, GROD, GRUA, GRUD, MVCU, RENU, LUPD, LDEL, and UPDT action types.
newctx	out	string	The value of the new context. Used by the MVCU action type.
statusreason	out	string	The reason for the status.
notes	out	string	An explanation, if any, for the status of the action. Used by all action types.
parentrole	out	string	The ID of a parent role. Used by the ACUA, RLUA, DELR, and GRUA action types.
actreason	out	string	The reason for the action. Used by all action types.
resmemberid	out	string	The ID of a resource member. Used by the AEDEFICIT action type.
roleid	out	string	The ID of a role. Used by the CFYAEDEF, CFYR, RLUA, DELR, and GRUA action types.
sodid	out	string	The ID of an SOD rule. Used by the AESOD action type.
srcuserid	out	string	The profile ID of a source user. Used by the ORGTFRSUB and ORGTFRSUBPULL action type.

Parameter	Direction	Size	Description
actstatus	out	string	The status code of the action. Used by all action types.
tplid	out	string	The ID of a template. Used by the ACUA, GRUA, and DELU action types.
tpluri	out	string	The URI template. Used by NRCR, NRUP, NRDL, NRMV action types.
userid	out	string	The profile ID of a user. Used by the CFYU, DELR, ORGADDMGR, ORGADDSUB, ORGDELMGR, ORGDELSUB, ORGTFRSUBPULL, LUPD, and RENU action types.
resourceaddress	out	string	The resource address. Used by NRCR, NRUP, NRDL, NRMV action types.
resourcetype	out	string	The resource type. Used by NRCR, NRUP, NRDL, NRMV action types.

# 3.7.319 WFRequestSubmit (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Submits the given request for processing. Returns only after the request is posted and any related plugins have been executed.

# Form of Request

#### Form of Response

#### **3.7.319.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
sessionid	in	string	Identifier for the session that contains the in-progress request.
serverid	in	string	Server ID that is processing the request, or empty if the request is running locally.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.320 WFRequestTopicsGet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Retrieves topics of the given request.

WFRequestTopicsGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

#### Form of Request

## Form of Response

```
<WFRequestTopicsGetResponse>
    <errmsg>...</errmsg>
    <handle>...</handle>
    <rc>...</rc>
    <sessdat>...</sessdat>
    <output>...</output>
</WFRequestTopicsGetResponse>
<WFRequestTopicsGet_vectorOutput>
    <role>...</role>
    <nosqroupname>...</nosqroupname>
    <nosgrouphostid>...</nosgrouphostid>
    <subgrpname>...</subgrpname>
    <subgrphostid>...</subgrphostid>
    <accountname>...</accountname>
    <accounthostid>...</accounthostid>
    <resourcehostid>...</resourcehostid>
    <resourceaddress>...</resourceaddress>
    <resgroupid>...</resgroupid>
    filename>...
</WFRequestTopicsGet_vectorOutput>
```

#### 3.7.320.1 Parameters

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.

Parameter	Direction	Size	Description
sessionid	in	string	Get the request as it exists in the given session. This is useful when a request is actively being created (or modified) but the user has not yet committed their changes and the API must get the information about the request as it is being changed. If this is empty, or if an actively changed request is not found in the given session, the request will be extracted as it exists currently.
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WFRequestTopicsGet_vectorOutput
role	out	string	Apply the role-type operations to this topic role.
nosgroupname	out	string	Apply the nosgroup-type operations to this topic group.
nosgrouphostid	out	string	Apply the nosgroup-type operations to this topic group.
subgrpname	out	string	Apply the nosgroup-type operations to this topic sub/child group.

Parameter	Direction	Size	Description
subgrphostid	out	string	Apply the nosgroup-type operations to this topic sub/child group.
accountname	out	string	Apply the account-type operations to this topic account.
accounthostid	out	string	Apply the account-type operations to this topic account.
resourcehostid	out	string	Apply the resource-type operations to this topic resource.
resourceaddress	out	string	Apply the resource-type operations to this topic resource.
resgroupid	out	string	Apply the resource-type operations to this topic resource.
profilename	out	string	Apply the profile-type operations to this topic profile.

# 3.7.321 WFResultSet (*Bravura Identity*, *Bravura Privilege*, *Access Certifier*, *Bravura Group*)

Sets the result of an implementation task for the logged-in user.

#### Form of Request

## Form of Response

## **3.7.321.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
reqacctsig	in	string	The action ID for this task.
status	in	int	The status of the task. 0 is failure, 1 is success.
reason	in	string	The reason for the result.
primary	in	string	The profile ID of the user on whose behalf this is being done. If blank, then delegation is not used.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

## 3.7.322 WFSendMail (Bravura Security Fabric)

Sends an email, via the workflow manager, to either the requester or recipient of a given request, or the authorizer or implementer of an action task associated with the request.

## Form of Request

#### Form of Response

## **3.7.322.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
targetuser	in	string	The profile ID of the user receiving the email. The email address used is from the EMAIL request attribute set for the profile or the output from IDSYNCH USERS EMAIL PLUGIN.
subjecttag	in	string	Subject tag in emails.
messagetag	in	string	Message tag in emails.
notifylevel	in	int	The notification level of the email for authorizers. 0 is Reminder, 1 is Initial, 2 is NeverMind, 3 is ThankYou, 4 is Final, 5 is Processing.
sessdat	in	string	The session handle from the previous API call.

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.323 WebAppDelete (*Bravura Security Fabric*)

Delete the specified web app.

## Form of Request

## Form of Response

## **3.7.323.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The web app's id
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting
_			from the API call.
rc	out	int	The return code from the API call.
10	out	ш	The retain code non the Arrican.
sessdat	out	string	The session handle for the next API call.

## 3.7.324 WebAppGet (Bravura Security Fabric)

Retrieves information for a specified web app.

## Form of Request

## Form of Response

## **3.7.324.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The web app's id
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

Parameter	Direction	Size	Description
output	out	array	An array of WebAppGet_vectorOutput
id	out	string	The web app's ID
name	out	string	The web app's name
description	out	string	The web app's description
filename	out	string	The web app's file name. Can be empty
creatorguid	out	string	The profile GUID of web app's creator
shared	out	int	Flag indicating if the web app is shared between users. 0 = not shared, 1 = is shared.

## 3.7.325 WebAppJsonGet (*Bravura Security Fabric*)

Retrieves JSON for a specified web app.

WebAppJsonGet streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.325.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The web app's id
handle	in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.

Parameter	Direction	Size	Description
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WebAppJsonGet_vectorOutput
json	out	string	The web app's JSON config. Sent in consecutive chunks which need to be reassembled. When combined, the length will not be more than 4194304

# 3.7.326 WebAppJsonValidate (*Bravura Security Fabric*)

Validate web app JSON config.

#### Form of Request

## Form of Response

## **3.7.326.1 Parameters**

Direction	Size	Description
in	string	Optional. The profile ID of the user. This is used to return the error message in the appropriate language. The default language will be used if a profile ID is not supplied.
in	string	The session handle from the previous API call.
in	array	An array of jsons_vectorInput
	in	in string in string

Parameter	Direction	Size	Description
json	in	string	The web app JSON config to validate. Send as a list of substrings of length 4096 or less, which when combined are no longer than 4194304
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WebAppJsonValidate_vectorOutput
valid	out	int	Indicates if the web app JSON is valid
error	out	string	If valid is false, this will contain an error message indicating the problem

## 3.7.327 WebAppList (*Bravura Security Fabric*)

## Returns a list of all web apps

WebAppList streams its results, which are obtained by repeated calls to this function. See Streaming Functions (p34) for more information.

## Form of Request

## Form of Response

## **3.7.327.1 Parameters**

Direction	Size	Description
in	string	The stream handle for fetching the next result from this call. Pass an empty string for the first call to this function, and pass the stream handle returned by the previous call to subsequent calls.
in	string	The session handle from the previous API call.
	in	in string

Parameter	Direction	Size	Description
errmsg	out	string	A message describing the error or success resulting from the API call.
handle	out	string	The stream handle for fetching the next result from this call. Pass this value as the stream handle for the next call to get the next result.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.
output	out	array	An array of WebAppList_vectorOutput
id	out	string	The web app's ID
name	out	string	The web app's name
description	out	string	The web app's description
filename	out	string	The web app's file name. Can be empty
creatorguid	out	string	The profile GUID of web app's creator
shared	out	int	Flag indicating if the web app is shared between users. $0 = \text{not shared}$ , $1 = \text{is shared}$ .

# 3.7.328 WebAppRemoveOverride (*Bravura Security Fabric*)

Remove a web app override for user on a specific account if it should no longer be allowed to be chosen.

## Form of Request

## Form of Response

## **3.7.328.1 Parameters**

Parameter	Direction	Size	Description
pluginctrlid	in	string	The web app disclosure GUID
profileguid	in	string	The user's profile GUID
accountguid	in	string	The managed account GUID
webappid	in	string	The web app's ID
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.329 WebAppSet (Bravura Security Fabric)

Add or Update a web app.

## Form of Request

## Form of Response

## **3.7.329.1 Parameters**

Parameter	Direction	Size	Description
id	in	string	The web app's ID
name	in	string	The web app's name
description	in	string	The web app's description. Blank entries accepted
filename	in	string	The web app's file name. Can be empty
creatorguid	in	string	Optional. The profile GUID of web app's creator. This must be set if the web app is not shared, otherwise it can be empty

Parameter	Direction	Size	Description
shared	in	int	Flag indicating if the web app is shared between users. 0 = not shared, 1 = is shared.
sessdat	in	string	The session handle from the previous API call.
input	in	array	An array of jsons_vectorInput
json	in	string	The web app's JSON config. Send as a list of substrings of length 4096 or less, which when combined are no longer than 4194304. Required for create, and optional for update.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

# 3.7.330 agentFinalResponse (*Bravura Security Fabric*)

Inform the transaction manager that an operation that was flagged as giving an asynchronous response has finished.

## Form of Request

## Form of Response

## **3.7.330.1 Parameters**

Parameter	Direction	Size	Description
batchsig	in	string	The ID identifying the batch.
itemsig	in	string	The action ID for this task.
succeeded	in	int	"1" if the task is successed, "0" otherwise.
agentresponse	in	string	The reply returned from the agent run
sessdat	in	string	The session handle from the previous API call.
errmsg	out	string	A message describing the error or success resulting from the API call.
rc	out	int	The return code from the API call.
sessdat	out	string	The session handle for the next API call.

**List of Return Values** 

The following table lists the values that may be returned by the API functions; In the SOAP API, the return values appear in the retval parameter. The values are provided along with a brief description of the message.

Value	Symbolic Constant	Description
0	API_SUCCESS	Success
1	API_NO_MORE_DATA	No more records available
2	ERR_UNKNOWN	Unknown error
3	ERR_NOT_LOGGED_IN	Not logged in or invalid session.
4	ERR_LOCKED_OUT	Account is locked out.
5	ERR_BAD_USER_PASS	Bad userid and password combination.
6	ERR_USER_EXISTS	User ID and/or account ID already exists, cannot create.
7	ERR_UC_EXPLICIT_USER_EXISTS	User has already been added to the user class.
8	ERR_UC_EXPLICIT_USER_NOT_EXISTS	User is not an explicit member of the user class.
9	ERR_UC_EXPLICIT_USER_ADD_FAIL	Failed to add user to the user class.
10	ERR_UC_EXPLICIT_USER_DELETE_FAIL	Failed to delete user from the user class.
11	ERR_UC_NO_EXPLICIT_FOR_MULTI_ACTOR	Explicit users can only be added to user classes with a single participant.

12	ERR_WOULD_EXCEED_LICENSE	Cannot add user, license would be exceeded.
13	ERR_DELEG_EXISTS	Given delegation already exists.
14	ERR_NO_SUCH_USER	Given user does not exist.
15	ERR_NO_SUCH_TEMPLATE	No such template.
16	ERR_NO_SUCH_ROLE	No such role.
17	ERR_DB_ERRORCODE_RESERVED	This error code is reserved.
18	ERR_INVALID_USERCLASS	Invalid user class.
19	ERR_USERCLASS_ACTOR_NOT_MATCH	Given user class participants do not match the definition.
20	ERR_MATCHES_IDFILTER_RULE	User ID cannot be used because it matches a filter rule.
21	ERR_USER_HAS_ACCOUNTS	Cannot delete user because it has at least one account.
22	ERR_LENGTH_MISMATCH	Length mismatch in input arrays.
23	ERR_WEAK_PASSWORD	Weak password.
24	ERR_ATTRIBUTES	The given values for the attributes are invalid.
25	ERR_LICENSE_EXCLUDES_FUNCTION	The server is not licensed for this function.
26	ERR_LICENSE_EXPIRED	The server's license has expired.
27	ERR_FAILED_ON_SOME_ACCOUNTS	An operation on multiple accounts failed for at least one of the accounts, possibly all of them.
28	ERR_USER_DOES_NOT_HAVE_TAG	The given user does not have a USERSTAT value for the given tag.

29	WARN_WEAK_PASSWORD	Password strength checking resulted in at least one warning, but no failures.
30	ERR_ACCOUNT_EXISTS	Account already exists, cannot create.
31	ERR_NO_SUCH_ACCOUNT	No such account.
32	ERR_QA_INCORRECT	At least one answer was wrong, or at least one question ID was not found.
33	ERR_QA_NOT_SET_UP	The given user has not set up the minimum number of questions.
34	ERR_OTHER_USER_OWNS_ACCOUNT	The given account exists, but is not owned by the given user.
35	ERR_COULD_NOT_CREATE_PASS	Could not create a randomly-generated password, probably due to conflicting or too-strict rules.
36	ERR_INVALID_USERSTAT	A userstat tag must be at least one character long.
37	ERR_NO_SUCH_TAG	The given user does not have the given userstat tag.
38	ERR_NO_SUCH_TARGET	No such target.
39	ERR_INPUT_MISMATCH	There is an inconsistency between some of the input parameters.
40	ERR_AGENT	One or more agent operations did not complete successfully.
41	ERR_GROUP_NOT_MANAGED	The given group exists, but is not managed by ID-Synch.
42	ERR_NO_SUCH_GROUP	The given group does not exist.
43	ERR_GROUP_EXISTS	The group already exists, cannot create.
44	ERR_AF_DISABLED	The advanced feature used by this function is disabled.

45	ERR_NO_SUCH_REQATTRS	The given request attributes do not exist.
46	ERR_MISSING_PARAMETERS	One or more parameters is missing or is null.
47	ERR_NOTHING_TO_DO	No action was taken since none was requested (perhaps an empty list was sent, or a variable name was mispelled).
48	ERR_INVALID_SESSKEY	The session key is invalid.
49	ERR_SESSKEY_EXPIRED	The session key has expired.
50	ERR_INVALID_RESID	The reservation ID is invalid.
51	ERR_COULD_NOT_RESERVE	Could not reserve ID(s).
52	ERR_INVALID_TEMPLATE_IMPLEMENTER	Invalid template (uses implementers).
53	ERR_NO_SUCH_WSTN_ID	Invalid workstation ID.
54	ERR_NO_WSTN_ADMINID	Administrator ID is not defined for that workstation.
55	ERR_NO_SUCH_RESOURCE	Invalid resource ID.
56	ERR_NO_SUCH_MANAGED_ACCOUNT	Invalid login id on the resource.
57	ERR_NO_ACL_CALL_API	User of API caller does not have permission.
58	ERR_PASSWORD_CHANGE_IMMINENT	Password change imminent, and the current stored value therefore cannot be guaranteed to be useful.
59	ERR_NO_PRIVILEGE	You do not have privilege to get the password.
60	ERR_SESSID_EXPIRED	The session id has expired.
61	ERR_INVALID_CLIENT_IP	API is invoked from an invalid client.
62	ERR_IP_NOT_CONF	API ip acl is not configured.

63	ERR_NO_SUCH_REQUEST	Given request ID does not exist.
64	ERR_NO_SUCH_REQITEM	Given request item ID does not exist.
65	ERR_NO_SUCH_SEGMENT	Given segment ID does not exist.
66	ERR_RESOURCE_EXISTS	Resource already exists, cannot create.
67	ERR_INVALID_RESOURCE_TYPE	Unsupported resource type.
68	ERR_INVALID_RESOURCE_ATTR	Unsupported resource attribute or parameter.
69	ERR_INVALID_ACTION_INPUT	Request action missing necessary inputs.
70	ERR_INVALID_ACTION_TYPE	Unsupported request action type.
71	ERR_IO_ERROR	Unexpected I/O error.
72	ERR_NO_RIGHT_MANAGE_CERT	The user has no right to manage certification. Please check ACL for this user.
73	ERR_ROLE_ALREADY_EXISTS	Role already exists.
74	ERR_ROLE_MEMBER_DOES_NOT_EXIST	The role's resource member does not exist.
75	ERR_NOT_AN_AUTHORIZER	User is not an authorizer.
76	ERR_NO_SUCH_AUTHORIZER	Authorizer does not exist.
77	ERR_INVALID_MEMBER_TYPE	Invalid role resource member type.
78	ERR_ALREADY_AN_AUTHORIZER_FOR_RESOURCE	E The authorizer is already an authorizer for this resource.
79	ERR_ROLE_CYCLE	The subrole cannot be added as a member resource if it is the same as the parent role.
80	ERR_ROLE_ENABLED	Cannot delete the role while it is enabled.

81	ERR_ROLE_HAS_DEPENDENTS	Cannot delete the role while it has dependents.
82	ERR_ROLE_HAS_USERS	Cannot delete the role while it has users assigned.
83	ERR_INVALID_GROUP	Invalid group id
84	ERR_INVALID_RESOURCE_MEMBER	Invalid resource member
85	ERR_VERIFY_FAIL	User verify failed
86	ERR_RULEGET_FAIL	Failed to get password rule
87	ERR_PASSWORDGEN_FAIL	Failed to generate password
88	ERR_UNLOCK_FAIL	Failed to unlock user account
89	ERR_RESET_FAIL	Failed to reset user password
90	ERR_INVALID_LOGIN	Invalid username or password, or the specified user has insufficient privileges
91	ERR_IVRREGSET_FAIL	Voice registration set failed
92	ERR_PINVALIDATE_FAIL	Pin validation failed
93	ERR_NOQUESTION_AVAILABLE	No question available
94	ERR_NOENGOUGH_AVAILABLE	Not enough questions available.
95	ERR_DLL_MISMATCH	An API DLL required by PSLang is either missing or missing a requested function.
96	ERR_NOPWDRULE_DEFINED	No password rule configured in the corresponding password policy.
97	ERR_USER_NOT_FOUND	User not found
98	ERR_EXCEEDED_RETRIES	Exceeded maximum number of retries.

99	ERR_INVALID_RESOURCE_SEARCH_CRITERION	Invalid search criterion for given resource type.
100	ERR_DIGITALID_NOT_FOUND	Digital ID not found
101	ERR_DIGITALID_SET_FAIL	Failed to set Digital ID.
102	ERR_CANNOT_RECOVER_PREV_PASSWORD	Failed to recover valid previous password.
103	ERR_SESSID_BAD_LICENSE	The session id is invalid due to an invalid license.
104	ERR_SESSID_NOT_FOUND	The session id does not exist.
105	ERR_SESSID_WRONG_USER	The requester id is invalid for the given session id.
106	ERR_REQUEST_DENIED	The request has been denied and cannot be checked out.
107	ERR_ALREADY_CHECKED_OUT	The password has already been checked out. You must make a new request to check out this password.
108	ERR_CANNOT_CHECKOUT_YET	The password cannot be checked out because the current time is before the requested start time.
109	ERR_NOT_CHECKED_OUT	The password is not checked out.
110	ERR_NOT_APPROVED_YET	The request needs approval before it the password can be checked out.
111	ERR_EXPIRED	The password cannot be checked out because the current time is later than the requested end time.
112	ERR_MAX_CHECKOUT_LIMIT_REACHED	Maximum checkout limit reached.
113	ERR_NOT_RECIPIENT	Logged-in user is not the recipient of the request batch.

114	ERR_NO_PERMS	Insufficient permissions to perform the requested operation.
115	ERR_WSTN_TYPE_MISMATCH	The workstation type does not match that of the policy.
116	ERR_NO_SUCH_POLICY	No such policy.
117	ERR_WSTN_ALREADY_MEMBER	The workstation is already a member of the given policy.
118	ERR_ADMIN_ID_ASSOC	Cannot delete the given managed system because its target administrator ID is managed by this policy.
119	ERR_CHECKED_OUT	Cannot delete the given managed system because one or more of its managed accounts have their passwords checked out.
120	ERR_NOT_MEMBER	The workstation is not a member of the given policy.
121	ERR_DESC_MANDATORY	The identification description is a mandatory input field.
122	ERR_COULD_NOT_RESERVE_INVALIDPROFILE	Could not reserve current profile ID, as it is in use with an invalid user.
123	ERR_RESERVE_ATTRIBUTE_HISTORICALVALUE	The specified attribute no longer officially exists, yet some users have values for this old attribute.
124	ERR_SAVED_CERT_ROUND_ID_NOT_EXIST	Saved certification campaign ID does not exist.
125	ERR_START_CERT_ROUND_BAD_TARGET_INFO	Missing or invalid target information.
126	ERR_START_CERT_ROUND_BAD_GROUP_INFO	Missing or invalid group information - need both groupid and target.
127	ERR_START_CERT_ROUND_BAD_ROLE_INFO	Missing or invalid role information.
128	ERR_START_CERT_ROUND_BAD_SOD_INFO	Missing or invalid SOD information.

129	ERR_START_CERT_ROUND_BAD_ATTR_INFO	Missing or invalid attribute information - need attribute ID and priority.
130	ERR_START_CERT_ROUND_BAD_USER_INFO	Missing or invalid user information.
131	ERR_START_CERT_ROUND_BAD_CERTIFIER_INFO	Missing or invalid reviewer information.
132	ERR_START_CERT_ROUND_BAD_INITIATOR_INFO	Missing or invalid initiator information.
133	ERR_START_CERT_ROUND_CERTIFIER_IS_CONSC	OLE_ONLY Reviewer cannot be a console only user.
134	ERR_START_CERT_ROUND_USER_IS_CONSOLE_0	ONLY User to be certified cannot be a console only user.
135	ERR_INVALID_PLATFORM_TYPE	The specified platform type is invalid.
136	ERR_UNREACHABLE_SERVER	Unable to contact the remote server.
137	ERR_RECIPIENT_HAS_NO_ACCOUNT	Recipient does not have account on target.
138	ERR_INVALID_RESULT_HANDLE	Invalid result set handle.
139	ERR_START_CERT_ROUND_USER_LACKS_ACL_TO	D_CERTIFY The reviewer does not have the ACL necessary to certify the user.
140	ERR_START_CERT_ROUND_BAD_USERCLASS_INI	FO Missing or invalid userclass information.
141	ERR_START_CERT_ROUND_BOTH_USER_AND_UC	C_SPECIFIED Cannot specify both Users and User- classes to select user population.
142	ERR_START_CERT_ROUND_USERCLASS_NOT_ON	NE_ACTOR Attempted to filter selected users with a userclass that does not only have a single actor.
143	ERR_START_CERT_ROUND_INVALID_RESOURCE_	TYPE Missing or invalid resource type specified for ALLRESOURCE.
144	ERR_START_CERT_ROUND_NO_RESOURCES	No resources specified for certification campaign.

145	ERR_NO_PREQUEST	Given prequest does not exist.
146	ERR_OUT_OF_RANGE	A specified value is outside the supported range of values.
147	ERR_NO_SUCH_RESATTR	No such resource attribute.
148	ERR_MAX_RESATTR_VAL_EXCEEDED	Exceeded maximum allowed values for resource attribute.
149	ERR_INVALID_RESATTR_VAL	Invalid value for resource attribute.
150	ERR_MAX_SEARCH_CRITERIA_REACHED	Maximum number of 5 search criteria has been exceeded.
151	ERR_SEARCH_FIELD_INVALID	The field choice you wish to search is invalid.
152	ERR_SEARCH_ATTRIBUTE_INVALID	The attribute you wish to search for is invalid.
153	ERR_SEARCH_VALUE_INVALID	Invalid search criteria.
154	ERR_UCP_POINT_INVALID	The user class point is not a valid user class point.
155	ERR_UCP_ID_INVALID	The user class point's id is not a valid instance of a user class point.
156	ERR_UC_MULTI_ACTOR	Only single-actor user class' memberships can be cached.
157	ERR_UCP_MULTI_ACTOR	Only single-actor user class points' memberships can be cached.
158	ERR_INVALID_SKIN	The specified skin doesn't exists or has invalid format.
159	ERR_USER_DISABLED	The user has been disabled.
160	ERR_NOT_REGISTER_SYNC_USER	This user is not registered as a transparent synchronization user.

161	ERR_INVALID_SYNC_OP	Invalid operation code for password synchronization.
162	ERR_INVALID_PHASE	Invalid phase specified.
163	ERR_POLICY_READ_ONLY	The given policy is read-only and cannot be modified.
164	ERR_ACCOUNT_ALREADY_MANAGED	The given account is already managed by this policy.
165	ERR_SYSTEM_NOT_MEMBER_OF_POLICY	The given system is not managed by this policy.
166	ERR_CERTIFIER_NOT_ORGMANAGER	Reviewer is not an Orgchart manager.
167	ERR_ACCOUNT_CHECKED_OUT	Cannot unmanage the account because its password is currently checked out.
168	ERR_ACCOUNT_ADMIN_ID_ASSOC	Cannot unmanage the given account because it is associated with a target administrator.
169	ERR_NO_SUCH_GSET	No group set with the given id has been configured on the given managed system policy.
170	ERR_CANNOT_DELETE_SELF	Cannot delete the logged-in account.
171	ERR_NOT_OTP_CALLER	The given user is not an OTP API caller.
172	ERR_INVALID_CIDR	The CIDR address given is not valid.
173	ERR_MISSING_PASSWORD	Password is not specified.
174	ERR_DUP_PASSWORD	Password can be either specified for the whole request or per password policy.
175	ERR_INVALID_PASSWORD_POLICY	Invalid password policies specified.
176	ERR_INVALID_TAG	Invalid tag specified for the session.
177	ERR_INVALID_GSET_ACCTID	Invalid account id on specified accthostid.

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178	ERR_MISSING_GSET_ACCTID	Missing accountid for access to group set request.
179	ERR_MISSING_GSET_ACCTHOSTID	Missing target id to perform lookups for the account to apply temporary group permissions.
180	ERR_MISSING_GSET_HOSTID	Missing managed system id.
181	ERR_NO_SUCH_USERCLASS	Given user class does not exist.
182	ERR_INVALID_INPUTTEXT_PARAMETER	A text parameter was passed to the method that did not comply to the API specification.
183	ERR_NO_SUCH_STATUS_OR_TYPE	The status or type specified was invalid.
184	ERR_WSTN_MUST_HAVE_POLICY	Managed system must belong to a managed system policy before accounts can be configured.
185	ERR_NO_OVERRIDE_PRIVILEGE	You do not have sufficient privileges to override the account's password.
186	ERR_PASSWORD_FAILED_STRENGTH_CHECK	Password strength checking failed. The password does not meet the requirements of the password policy
187	ERR_MUST_USE_CGI	The password policy for this managed system policy requires passwords to be overriden through the Web interface.
188	ERR_FUNC_NOT_ALLOWED	You are not allowed to call this API function.
189	ERR_NO_SUCH_SERVICE_TYPE	Invalid service type
190	ERR_NO_SUCH_SERVICE_FOUND	Service type and service name are not found in database
191	ERR_NO_SUCH_FOUND_OBJ	No such entry found in database
192	ERR_FOUNDACCTMNGOBJ_DELETE_FAIL	Failed to detach managed account from service
193	ERR_PREQUEST_MEMBER_ALREADY_EXISTS	Pre-defined request resource member already exists.

194	ERR_NO_SUCH_PREQUEST_MEMBER	No such pre-defined request resource member.
195	ERR_TARGET_HAS_DEPENDENTS	Cannot delete the target while it has dependents.
196	ERR_TEMPLATE_HAS_DEPENDENTS	Cannot delete the template while it has dependents.
197	ERR_INVALID_OPERATION_TYPE	Invalid or unsupported operation type.
198	ERR_NO_SUCH_LOCATION	Invalid location ID.
199	ERR_NO_SUCH_OBJTYPE	Invalid object type ID.
200	ERR_INVALID_SQL	The SQL specified is invalid.
201	ERR_INVALID_LONGID_SHORTID	Long ID and short ID should not be empty.
202	ERR_NO_MAQ	Given account set does not exist.
203	ERR_INVALID_MAQ_OPERATION	Invalid operation(s) for account set request.
204	ERR_INVALID_MAQ_MEMBER	Specified account doesn't belong to the account set.
205	ERR_API_TIMEOUT	The API call has timed out.
206	ERR_REPORT_FAILED_TO_RUN	Failed to execute a report.
207	ERR_REPORT_FAILED_TO_LOAD	Failed to load a report.
208	ERR_REPORT_FAILED_TO_CANCEL	Failed to cancel a report.
209	ERR_CANNOT_MODIFY	Resource or configuration cannot be modified.
210	ERR_MISSING_REPORT_FILE	Failed to locate a report.
211	ERR_RESOURCE_HAS_DEPENDENTS	Cannot delete the resource while it has dependents.

212	ERR_INVALID_EXPRESSION	Value is not a valid expression.
213	ERR_NO_SUCH_PARTICIPANT	Invalid participant ID.
214	ERR_INVALID_PROFILE_ATTR	Invalid profile attribute.
215	ERR_DUPLICATE	Duplicate value specified.
216	ERR_UNREACHABLE_SERVER_SUSPENDED	The remote server is unreachable and replication to it is suspended.
217	ERR_INVALID_GROUP_MEMBERSHIP_TYPE	Invalid group membership type.
218	ERR_NO_SUCH_UCP	Generic UCP ID does not exist.
219	ERR_UCP_ALREADY_EXISTS	Generic UCP ID already exists.
220	ERR_NO_SUCH_UCP_NAME	No such generic UCP type
221	ERR_INVALID_CATEGORY_ID	Invalid or empty UCP ID
222	ERR_INVALID_CATEGORY_DESC	Invalid or empty UCP description
223	ERR_TOO_MANY_PARTICIPANTS	This user class has more participants than the UCP allows for.
224	ERR_START_CERT_ROUND_INVALID_PDR_TYPE	Missing or invalid PDR type specified.
225	ERR_START_CERT_ROUND_INVALID_PDR	Missing or invalid PDR specified.
226	ERR_NODE_DOES_NOT_EXIST	The specified node does not exist.
227	ERR_COULD_NOT_CREATE_VAULT_ACCOUNT	You do not have sufficient privileges to add a new vault account.
228	ERR_INVALID_TEMPLATE_ID	Template with given id does not exist
229	ERR_INVALID_ENTATTR_TYPE	Missing or unsupported entitlement attribute type.

230	ERR_INVALID_ENTATTR_KEY	Missing or unsupported entitlement attribute.
231	ERR_INVALID_ENTATTR_ENT	Missing or invalid entitlement specified.
232	ERR_COULD_NOT_RESERVE_INVALIDRESOURCE	Could not reserve current attribute ID, as it is in use by an invalid resource.
233	ERR_LOWER_THRESHOLD_FOR_PEER_COMPARIS	SON_INVALID Lower threshold for peer comprison invalid.
234	ERR_UPPER_THRESHOLD_FOR_PEER_COMPARIS	SON_INVALID Upper threshold for peer comprison invalid.
235	ERR_THRESHOLD_FOR_PEER_COMPARISON_INV	ALID Upper threshold must be greater lower threshold.
236	ERR_CHECKOUT_INVALID_GUID	Invalid check-out guid.
237	ERR_CHECKOUT_NOT_ACCOUNT_ACCOUNTSET_	GROUPSET Check-out is not for account, accountset, or groupset.
238	ERR_CHECKOUT_NOT_RECIPIENT	Current user is not check-out recipient.
239	ERR_CHECKOUT_NOT_CHECKED_OUT	Check-out is not checked out.
240	ERR_CHECKOUT_USER_CANNOT_ACCESS_EXTER	NSIONS Current user cannot access extensions.
241	ERR_CHECKOUT_LENTGH_LONGER_THAN_MAX_	INTERVAL Check-out length is longer than max interval.
242	ERR_CHECKOUT_HAS_PREAPPROVED_ACL	Check-out has pre-approved check-out ACL.
243	ERR_CHECKOUT_NOT_ACCOUNT_ACCOUNTSET	Check-out is not for account or accountset.
244	ERR_CHECKOUT_ACCOUNTSET_ACCOUNT_NOT_	IN_CHECKOUT Check-out for accountset does not contain account/wstn sent as parameter.
245	ERR_CHECKOUT_ACCOUNT_NOT_IN_CHECKOUT	Account/Wstn does not belong to check-out.
246	ERR_REQUEST_WITH_NO_CHECKOUT	Request does not have a check-out.

247	ERR_USERCLASS_HAS_MORE_THAN_ONE_ACTOR User class must have only one actor.	
248	ERR_INVALID_CERTIFICATION_METHOD	Invalid certification method specified.
249	ERR_INVALID_UCP_MATCHING_INFO	Invalid UCP Matching criteria specified.
250	ERR_START_CERT_ROUND_USERCLASS_BAD_AC	TOR Invalid number of actors associated with user- class.
251	ERR_MUST_MAP_CERTIFIER	Error in userclass mapping - must map [CERTI-FIER].
252	ERR_TOO_MANY_OBJECTS	Only one parent and child object allowed.
253	ERR_INVALID_RELATION	Invalid relation between objects specified.
254	ERR_DELEG_MISSING_PRIMARY_DELEGATE	You must specify either the primary or the delegate to cancel delegations.
255	ERR_NO_SUCH_SYSVAR	The specified system variable does not exist, is disabled, or is inaccessible by the current product license or given product administrator.
256	ERR_INVALID_SYSVAR_VAL	The given value is invalid for the given system variable.
257	ERR_INVALID_GUID	Invalid GUID
258	ERR_NO_SUCH_WEBAPP	Given web app does not exist.
259	ERR_CREATOR_REQUIRED_IF_NOT_SHARED	The creatorguid value must correspond to a valid user if web app is not shared
260	ERR_JSON_EXCEEDS_MAXIMUM_LENGTH	JSON exceeds maximum allowed length of 4194304
261	ERR_JSON_PARSE_ERROR	JSON failed to be parsed
262	ERR_JSON_ROOT_NOT_OBJECT	JSON root is not of type Object

263	ERR_JSON_FIELD_MISSING	JSON is missing a field
264	ERR_JSON_FIELD_WRONG_TYPE	JSON contains a field with the wrong type
265	ERR_JSON_FIELD_INVALID_VALUE	JSON contains a field with an invalid value
266	ERR_JSON_DUPLICATE_ORDER	JSON contains two or more steps with the same value for the order field. Duplicate order values are not allowed.
267	ERR_WEBAPP_EMPTY_JSONS	JSONS field is empty
268	ERR_WEBAPP_EMPTY_ID	ID field is empty
269	ERR_WEBAPP_EMPTY_NAME	NAME field is empty
270	ERR_NO_PRIVILEGE_LARGE_CREDENTIAL	Insufficient privilege to get the large credential file
271	ERR_RESET_PARTIAL_SUCCESS	Reset succeeded on some target systems.

idapitool 5

# **Description**

Use the idapitool program for testing API Service (idapi) dynamic-link/shared-object library loading and the login function. If the login succeeds, the program also prints the encrypted login password for further use.

The Windows executable program is located in the \<instance>\lib\ directory. The Unix version is located in the addon/transparent-synch/idapi/ directory of the psunix archive.

# **Usage**

```
idapitool.exe [option] -psw <password> -user <userID> -url <url>
```

Table 5.1: idapitool arguments

Argument	Description
-ca <directory certstore></directory certstore>	On Unix, this is the directory that holds CA certificates, or a file that holds CA certificates to trust.
	On Windows, this is the certificate store.
-cert <file[:password] serialno></file[:password] serialno>	On Unix, this is the client certificate used for client authentication. The certificate must be in PEM format. The password is optional.
	On Windows, this is the serial number of the client certificate used for client authentication.
-ignore	Ignore all server certificate warnings.
-lib < <i>libcurl-path</i> >	For Unix, this is the full path of libcurl, given 0 to disable using the libcurl. This argument suppresses the environment variable HI_CURL_PROV setting if both are given.
-proxy < <i>proxy</i> >	The proxy server to access IDAPI URL.
-proxypass <pre>cproxypass&gt;</pre>	The user password for proxy server authentication.
-proxyuser <pre>cproxyuser&gt;</pre>	The user name for proxy server authentication.
-psw <password></password>	The plain text password of the idapi login user (required)
-q	Quiet mode, prints out the encrypted password only.
-url < <i>url</i> >	The idapi URL. (required)
-user <user></user>	The idapi login user ID. (required)

# **Examples**

1. To retrieve the encrypted password for the API user from an instance with the SOAP API configured for SSL:

```
idapitool -ca /etc/pki/CA/certs/ -lib /usr/lib/libcurl.so.4 -psw password -url
https://host.domain.com/default/idapi -user _API_USER
```

2. To retrieve the encrypted password for the API user from an instance with the SOAP API *not* configured for SSL:

```
idapitool -psw password -url http://host.domain.com/default/idapi -user _API_USER
```

# **Platform Type ID Values**

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Several API functions accept and/or return platform type values. These values are abbreviated ID codes rather than complete names of platform types. The following is a list of possible ID values and their associated platform types.

ID	platform type
ACF2	ACF2 (with Mainframe Connector)
AD	Active Directory DN
AS400	IBM OS/400 Server
AS400SCRIPT	IBM OS/400 Server (Script)
AWS	Amazon Web Services
BES	BlackBerry Enterprise Server
BESWS	BlackBerry Enterprise Web Service
BITLOCKER	Bitlocker Hard Drive Encryption
CACHE	Intersystems Cache/Server
CACHESCRIPT	Intersystems Cache/Server (Script)
CIFS	SMB Protocol for Active Directory DN
CONCUR	Concur
CSV	CSV File Connector
CLEARTRUST	RSA Access Manager
DB2	DB2 Database
DB2SCRIPT	DB2 Database (Script)
DOMINO	Lotus Domino Server
DOSKEY	Win32 Console Script
EXG2K7_64BIT	Exchange 2007+ Server
GAPPS	Google Applications
GDOMINO	Lotus Domino Server (Script)
GRPWISE	Groupwise Domain
HEAT	FrontRange HEAT (Customers)
HEATADMIN	FrontRange HEAT (Administrators)
HITRACK	Hitachi Data Systems Hi-Track Monitor
HPSMWS	HP Service Manager, Web Service
HSS	Oracle Hyperion EPM Shared Services

ID	nlatform type
IDM	Platform type Hitachi ID Systems Suite
ILEARN	Oracle iLearning
JDEOW_80	JD Edwards EnterpriseOne 8.0
JDEOW_81	JD Edwards EnterpriseOne 8.1
JDEOW_90	JD Edwards EnterpriseOne 9.0
LDAP	LDAP Directory Service
LYNC	Microsoft Lync
NDS	Novell eDirectory
NETPOINT	Oracle Access Manager
NRSHRPT	SharePoint Resource
ODBCSCRIPT	ODBC Database (Script)
ODBCSCRIPT32	ODBC Database (32-bit) (Script)
OFFICE365	Microsoft Office365 Online Service
OPAN	Hitachi IT Operations Analyzer
ORACLE	Oracle Database
ORACLESCRIPT	Oracle Database (Script)
PEOPLESOFT810	PeopleSoft Application Server (PeopleTools 8.1x)
PEOPLESOFT820	PeopleSoft Application Server (PeopleTools 8.20 - 8.48)
PEOPLESOFT849	PeopleSoft Application Server (PeopleTools v8.49+)
PEOPLESOFTHR	Peoplesoft Human Capital Management
PWRSHELL	PowerShell Script
PYTHON	Python Script
RACF	RACF (with Mainframe Connector)
REMEDY	Remedy Action Request System
REMEDY_ITSM	Remedy Action Request System IT Service Manager
RSAAM	RSA Authentication Manager 7.1/8.x
SALESFORCE	Salesforce
SAP	SAP Server
SHRPT	SharePoint Server
SITEMINDER	Netegrity SiteMinder
SMB	SMB Protocol
SOAP	SOAP Web Service
SQL	Microsoft SQL Server
SQLSCRIPT	Microsoft SQL Server (Script)
SSH	SSHD Host target system
SUCCESSFACTORS	SuccessFactors system
SVCNOW	ServiceNow IT Service Management
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ID	platform type
SYBASECT	Sybase AES Database
SYBASECTSCRIPT	Sybase AES Database (Script)
TAM	Tivoli Access Manager
TAMSSO	Tivoli Access Manager for Enterprise SSO
TELNET	Telnet target system
TOPSECRET	TopSecret (with Mainframe Connector)
UNIX	Unix target system
VASCO	Vasco IDENTIKEY Server
WEBEX	WebEx
WEBEXCONN	WebEx Connect
WIN2K	Active Directory
WINNT	Windows NT Server
XML	XML-RPC Web Service

## ResourceFind Search Criteria

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ResourceFindCriteria (p349) returns the search criteria for each resource type that can be found with ResourceFind (p345). See Searching for resources with ResourceFind (p35) for an explanation of how to use the criteria with ResourceFind.

#### 7.1 ACCTATTR (Account Attribute) Resource Type

This resource type accepts platform types as one of its search criteria. See Platform Type ID Values for the list of possible values.

name	description	type
id	Account attribute ID	string
override	Override level; 0 = default, 1 = platform type, 2 = target system	integer
platformid	Platform type	string
targetid	Target ID	string
createaction	Action to perform when creating account; $C = \text{exact copy}$ , $I = \text{ignore}$ , $R = \text{copy}$ , replacing ID, $S = \text{set}$	string
updateaction	Action to perform when updating account; $S = \text{set}$ always, $C = \text{set}$ when mapped profile attribute changes, $I = \text{ignore}$	string
seqno	Order to set this attribute	integer
encoding	Encoding to use; N = no encoding, B = base 64	string
attrtype	attribute.datatype; $I = binary$ , $B = boolean$ , $F = memo$ , $N = integer$ , $S = string$	string
minvalues	Minimum number of values required	integer
maxvalues	Maximum number of values allowed	integer
userattr	Name of profile attribute to which the value should be set	string
listattr	Do we list this attribute	boolean
setuserattr	Will this target attribute be used to set profile attribute values during auto-discovery	boolean
makediffs	Should iddiscover produce diffs on this attribute	boolean

## 7.2 ATTR (Profile/Request Attribute) Resource Type

name	description	type
attrkey	Global attribute ID	string
description	Description of attribute	string
type	Type of value; $B = boolean$ , $C = string$ , $D = datetime$ , $L = image$ link, $N = integer$ , $M = memo$ , $P = password$ , $U = user$ , $F = file$	string
length	Field length	integer
notes	Help text for more attribute information	string
dispformat	Displayed format string	string
format	Format string	string
regexp	Regular expression to validate user input	string
nonevalue	Display value for no value of a boolean data type attribute	string
truevalue	Display value for true value of a boolean data type attribute	string
falsevalue	Display value for false value of a boolean data type attribute	string
minrequire	Minimum number of required values; 0 = optional	integer
maxallowed	Maximum number of allowed values; -1 = infinite	integer
dupallowed	Is this attribute allowed to have duplicate values	boolean
sendable	Allow values of this attribute to be sent in emails	boolean
allowcopy	Is this attribute used for profile comparison	boolean
invalidateauth	Invalidate authorizations if the attribute value is changed	boolean
defaultval	Are there default value(s) for the attribute	boolean
fixedval	Are there restricted values for the attribute	boolean
valplugin	Plugin to run to generate a list of restricted values	string
verify	User needs to re-type attribute value for confirmation	boolean
attrtype	The scope of the attribute; $P = Profile$ , $R = Request$ , $I = Request$ item	string
makediffs	Should iddiscover produce diffs on this attribute, for use with idtrack	boolean
enforceinherit	Inherit validation enforcement from the attribute group to which the attribute belongs	boolean
enforcecreate	Enforce validation when creating accounts	boolean
enforceupdate	Enforce validation when updating accounts; true when always enforcing or enforcing when updating this attribute's values	boolean
enforceother	Enforce validation when updating accounts; true when always enforcing	boolean

name	description	type
displayattr	Display refinement; for boolean data type, C=checkbox, A=radio buttons; for date/time data type, D=date only (calendar); for string or integer data type, B=drop-down, E=drop-down with two columns; for user data type, V=allow invalid; for file or link data types, I=image, T=validate	string
order	How to order the restricted attribute values; A = Actual value, D = Displayed value	string
advsearchable	Is this attribute available for advanced search?	boolean
onreport	Is attribute shown on reports?	boolean
vcardprop	vCard property to which this attribute is mapped	string
authattribute	Is this attribute allowed to be used for authentication	boolean
parentattr	Parent attribute key	string
keepcase	Do entered restricted values keep their case	boolean
submitonly	Is this attribute editable only request creation	boolean

## 7.3 ATTRGRP (Attribute Group) Resource Type

name	description	type
attrgroupid	Attribute group ID	string
desc	Attribute group description	string
display	How to display the attributes of this group on requests; $M = Main$ page, $S = Subsidiary$ , $N = None$	string
displayorder	Relative display order of attribute	integer
enforcecreate	Enforce validation during account creation	boolean
enforceupdate	Enforce validation during account updates; true if enforcing always or only when attributes in group change	boolean
enforceother	Enforce validation during account updates; true if enforcing always	boolean
notesabove	Notes above attribute	string
notesbelow	Notes below attribute	string

## 7.4 MACC (Managed account) Resource Type

name	description	type
policyid	ID of the policy this account is on	string
validity	$1 = \text{only valid accounts}, \ 0 = \text{only invalid accounts}, \ -1 = \text{both valid}$ and invalid accounts	integer
isadmin	Is administrator	boolean
workstnid	workstation netbios ID	string
accountname	The name of the account	string

### 7.5 MGRP (Managed Group) Resource Type

name	description	type
targetid	Target system ID	string
invalidOnly		boolean
issecurity		boolean
grouptype	A target specific string representing the type of group	string
invalidDays		integer
unusedOnly		boolean
nosgroupname	Full ID of this group on this system	string
shortid	Common name of this group on this system	string
notes	Descriptive text about the group	string
addtype	Four-letter add-type code; OPEN = Open, MODR = Moderated, SUBS = Open to members of another group, CLOS = Closed	string
deltype	Four-letter del-type code; OPEN = Open, MODR = Moderated, SUBS = Open to members of another group, CLOS = Closed	string
location	Which location	string
type	Which type	string
ranking	Popularity ranking	integer
url	URL with group information	string
ownerasauth		boolean
overrideimpl	Override target implementation setting	string
oobdiffsadd	Should idtrack detect additions to managed group and request removal	string

name	description	type
oobdiffsdel	Should idtrack detect deletions from managed group and request addition	string
oobdelay	Flag to delay processing additions to managed group until after users are loaded into the xgrpmbr table. i.e. don't do the oob check the first time to avoid detecting all users as being out of band additions	boolean
oobemailplugin	Plugin to run to generate a list of email recipients for out of band changes to the Managed group	string
rbacenforce	Enforce managed group under RBAC roles	boolean
daction	Default action for deficit of this resource; ADD = Add the resource, EXCEPTION = Request an exception, INHERIT = Inherit default,REMOVE = Remove the resource	string
saction	Default action for surplus of this resource; ADD = Add the resource, EXCEPTION = Request an exception, INHERIT = Inherit default,REMOVE = Remove the resource	string
description	Descriptive name of this group	string
invalid		boolean
automanaged	Read only field indicating whether the group is auto managed by Hitachi ID Suite or not	boolean

## 7.6 NETRES (Network Resource) Resource Type

name	description	type
type	Network resource type	string
hostid	Target system ID	string

## 7.7 ROLE (Role) Resource Type

name	description	type
roleid	Role ID	string
enabledOnly	Whether only enabled roles should be returned	boolean
desc	Role description	string
assignable	Whether this role is assignable to a user. This would be false for roles that are used solely as sub-roles	boolean
enabled	While a role is in the midst of being defined by the role miner it should not be displayed to users or otherwise affect anything	boolean
deprecatedreason	Reason for deprecation	string
rbacenforce	Enforce role under RBAC roles?	boolean
daction	Default action for deficit of this resource: ADD, EXCEPTION, INHERIT, or REMOVE	string

## 7.8 TARG (Target System) Resource Type

name	description	type
id	Unique Identifier for this target system	string
inventory		boolean
platform	Platform of target system	string
proxyOnly		boolean
isapp		boolean
group	Target system group this target belongs to	string
itsm		boolean
type	Type of target system: M = Manual, A = Discovered, T = Template	string
description	Description of target system	string
address	Network address for this target system	string
url	URL with target information for users to understand which targets they could reset passwords/modify login IDs on	string
include	Include IDs if no IDInclude rule applies	boolean
casegen	Default or external program to generate the new ID in correct cases (all upper, all lower, etc.)	string
listgen	External program to convert this target system into a list of other target systems	string

name	description	type
mandatory	Users must have at least one account on this target	boolean
agenttime	Agent timeout, in seconds	integer
listtime	List timeout, in seconds	integer
Istminsize	Minimum list file size, in bytes	integer
groupownerphase	The phase group owner should be added to when being automatically as authorizer	integer
proxy	Proxies	string
persistentserver	Server to use for persistent list	string
persistentport	port to user for persistent list	string
claimalias		boolean
disableverify		boolean
multiowner	Target system supports multiple owners on groups	boolean
isapp		boolean
selfmanagehide		boolean
idarchivepush		boolean
idcheck		boolean
groupinherit		string
implinherit		string
contattr	Attribute holding the value for _container_dn for this host	string
expusr	Find password-soon-to-expire users during auto discovery	boolean
delalias	Specify if users are allow to delete accounts on this target; X = DEFAULT, T = ALLOW, F = BLOCK	string
adminresethide		boolean
disablereset		boolean
selfresethide		boolean
disableunlock		boolean
adminunlockhide		boolean
selfunlockhide		boolean
adminclaimhide		boolean
selfclaimhide		boolean
mustselect		boolean
updserver	Server ID that will update this target	string
managegrp	Auto-manage groups; N = None, O = Open, M = Moderated	string
mgrpownerasauth	Automatically add owners as authorizers	boolean
mgrpaddtype	Four-letter add-type code; OPEN = Open, MODR = Moderated, SUBS = Open to members of another group, CLOS = Closed	string
mgrpdeltype	Four-letter del-type code; OPEN = Open, MODR = Moderated, SUBS = Open to members of another group, CLOS = Closed	string

name	description	type
nrplatform	Type of network resource	string
rbacenforce	Enforce target under RBAC roles	boolean
daction	Default action for deficit of this resource; ADD = Add the resource, EXCEPTION = Request an exception, INHERIT = Inherit default,REMOVE = Remove the resource	string
saction	Default action for surplus of this resource; ADD = Add the resource, EXCEPTION = Request an exception, INHERIT = Inherit default,REMOVE = Remove the resource	string
oneaccount	When a user requests a template on this system and already has one existing account, assume that the template request targets that existing account.	boolean
enable	Whether target supports ENABLE capability.	boolean
incremental	Control target's listing (generate full list every time vs incremental)	boolean
persistentlist	Controls if the target has persistent list enabled.	boolean

## 7.9 TMPL (Template Account) Resource Type

name	description	type
targetid	Target system ID	string
inventoryonly	If inventoryonly is -1, then don't search on that field; otherwise, $1/0 = \text{template is/isn't used for inventory provisioning}$	integer
id	Unique identifier of template	string
description	Description for template	string
inventory	Template is used for inventory provisioning	boolear
location	Location used to help find a suitable template	string
type	Type used to help find a suitable template	string
platform	Type of target system	string
accountname	Long format (e.g. for NDS, LDAP) login ID of the account that would be replicated when creating new IDs	string
blockbatch	Denial of this template blocks entire batch	boolear
parameter	Extra parameters to pass to our agent, which it might use to create new IDs using this template which are not-quite-identical to the template user	string
deleted	Marked as deleted	boolear
requirepwd	Password required or not when creating new users	boolear
native	The template is native template	boolear

name description		type
overridetarget	Override target authorization setting	string
overrideimpl	Override target implementation setting	string
usercompare	Is the template used for user comparison	boolean

## 7.10 UC (User class) Resource Type

name	description	type
id	Unique ID of class	string
desc	Description given to this class	string
builtin	Whether this class is built-in (cannot be modified)	boolean
source	User class point that this userclass is created for	string
reason	The reason for deprecating	string

## 7.11 UGRP (User group) Resource Type

name	description	type
id	Unique ID of user group	string
pointid	ID of user class point associated with group	string
desc	description of user group	string
reset	'Change passwords' privilege	boolean
resetexpire	'Change and expire passwords' privilege	boolean
hdd	'Unlock encrypted systems/accounts' privilege	boolean
unlock	'Unlock accounts' privilege	boolean
profileenable	'Enable/Disable user profile' privilege	boolean
profileunlock	'Unlock user profile' privilege	boolean
view	'View profile information' privilege	boolean
viewacct	'View accounts' privilege	boolean
viewrole	'View roles' privilege	boolean
update	'Update account' privilege	boolean

addrole 'Add roles' privilege boolean delrole 'Delete roles' privilege boolean create 'Create account' privilege boolean create 'Create account' privilege boolean enable 'Enable account' privilege boolean disable 'Disable account' privilege boolean disable 'Disable account' privilege boolean disable 'Disable account' privilege boolean managegroups 'Manage group memberships' privilege boolean pmreqrevoke 'Revoke privileged access requests' privilege boolean pmreqrevoke 'Revoke privileged access requests' privilege boolean rename 'Rename account' privilege boolean movectx 'Move user from one context to another' privilege boolean wiewreqopen 'View open requests' privilege boolean viewreqopen 'View archived requests' privilege boolean viewreqolosed 'View archived requests' privilege boolean delegmang 'Delegate workflow requests' privilege boolean delegmang 'Delegate workflow requests' privilege boolean deleg 'Delegate authority' privilege boolean deleg 'Delegate authority' privilege boolean viewreqa 'View security questions' privilege boolean viewqa 'View security questions' privilege boolean viewqa 'View security questions' privilege boolean editids 'Attach other accounts' privilege boolean editids 'Attach other accounts' privilege boolean vieworg 'Browse the OrgChart' privilege boolean petres 'Request access to network resources' privilege boolean prowaccess 'Request / Check out / Check in access' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean 'Search all recorded sessions' privilege boolean 'Groups' privilege boolean 'Groups' privilege boolean 'Groups' privilege boolean 'Groups' privilege boolean 'Manage tokens' privilege boolean 'Manage tokens' privilege boolean '	name	description	type
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editids 'Attach other accounts' privilege boolean netres 'Request access to network resources' privilege boolean vieworg 'Browse the OrgChart' privilege boolean manageorg 'View my subordinates' privilege boolean pwdaccess 'Request / Check out / Check in access' privilege boolean smonmanage 'Request to search all recorded sessions' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean smonsearch 'Search all recorded sessions' privilege boolean smonsearch or 'Search all recorded sessions' privilege boolean smonremove 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean dhoccertify 'Initiate a review of all entitlements' privilege boolean	viewqa	'View security questions' privilege	boolean
netres 'Request access to network resources' privilege boolean vieworg 'Browse the OrgChart' privilege boolean manageorg 'View my subordinates' privilege boolean pwdaccess 'Request / Check out / Check in access' privilege boolean smonmanage 'Request to search all recorded sessions' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded sessions packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean ladhoccertify 'Initiate a review of all entitlements' privilege boolean	bypassqa	'Bypass security questions' privilege	boolean
vieworg 'Browse the OrgChart' privilege boolean manageorg 'View my subordinates' privilege boolean pwdaccess 'Request / Check out / Check in access' privilege boolean smonmanage 'Request to search all recorded sessions' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean 'Tenable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean ladhoccertify 'Initiate a review of all entitlements' privilege boolean	editids	'Attach other accounts' privilege	boolean
manageorg 'View my subordinates' privilege boolean pwdaccess 'Request / Check out / Check in access' privilege boolean smonmanage 'Request to search all recorded sessions' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	netres	'Request access to network resources' privilege	boolean
pwdaccess 'Request / Check out / Check in access' privilege boolean smonmanage 'Request to search all recorded sessions' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	vieworg	'Browse the OrgChart' privilege	boolean
smonmanage 'Request to search all recorded sessions' privilege boolean smonsearch 'Search my recorded sessions' privilege boolean smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	manageorg	'View my subordinates' privilege	boolean
smonsearch 'Search my recorded sessions' privilege boolean smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	pwdaccess	'Request / Check out / Check in access' privilege	boolean
smonsearchother 'Search all recorded sessions' privilege boolean smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	smonmanage	'Request to search all recorded sessions' privilege	boolean
smonview 'Download recorded sessions' privilege boolean smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	smonsearch	'Search my recorded sessions' privilege	boolean
smonremove 'Remove recorded session packages' privilege boolean viewgroups 'Groups' privilege boolean reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	smonsearchother	'Search all recorded sessions' privilege	boolean
viewgroups'Groups' privilegebooleanreg'Enable password synchronization' privilegebooleanivrreg'Generate voice print enrollment PIN' privilegebooleantoken'Manage tokens' privilegebooleantrackreq'Track request status' privilegebooleanadhoccertify'Initiate a review of all entitlements' privilegeboolean	smonview	'Download recorded sessions' privilege	boolean
reg 'Enable password synchronization' privilege boolean ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	smonremove	'Remove recorded session packages' privilege	boolean
ivrreg 'Generate voice print enrollment PIN' privilege boolean token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	viewgroups	'Groups' privilege	boolean
token 'Manage tokens' privilege boolean trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	reg	'Enable password synchronization' privilege	boolean
trackreq 'Track request status' privilege boolean adhoccertify 'Initiate a review of all entitlements' privilege boolean	ivrreg	'Generate voice print enrollment PIN' privilege	boolean
adhoccertify 'Initiate a review of all entitlements' privilege boolean	token	'Manage tokens' privilege	boolean
,	trackreq	'Track request status' privilege	boolean
mobile 'Manage mobile devices' privilege boolean	adhoccertify	'Initiate a review of all entitlements' privilege	boolean
	mobile	'Manage mobile devices' privilege	boolean

name	description	type
personalvault	'Manage personal vault' privilege	boolean
smonbrowserview	'View recorded sessions in browser' privilege	boolean
extendcheckout	'Request check-out extensions' privilege	boolean
viewworkflow	'View only for workflow requests' privilege	boolean
showans	'View answers to security questions' privilege	boolean

## 7.12 WSTN (Workstation) Resource Type

name	description	type
workstnid	Workstation netbios ID	string
description	Workstation description	string
ip	IP address - max for ipv4 is 15, ipv6 is 45	string
status	Current status of the workstation; M = Workstation passwords are managed, U = Workstation passwords are unmanaged, only a storage	string
ostype	Operating system/Application type; WINNT = Windows NT, WINNTS = Windows NT Server, WINNTDC = Windows NT Domain Controller, WIN2000 = Windows 2000, WIN2000S = Windows 2000 Server, WIN2000DC = Windows 2000 Domain Controller, WINXP = Windows XP, WIN2003S = Windows 2003 Server, WIN2003DC = Windows 2003 Domain Controller, UNIX = Unix, LINUX = Linux, IDM = Hitachi ID Suite, SQL = MS SQL, ORACLE = ORACLE Database, DB2 = DB2 Database, WINVISTA = Windows Vista, LONGHORN = Windows Longhorn	string
wstntype	Type of server/application being managed; $W = Workstation$ , $S = Server$	string
osversion	Workstation/application version string (e.g Windows 2000 Server)	string
logonuser	User ID of the last logged in user	string
url	URL with resource information	string
platform	Platform of the workstation	string
deleted	Marked as deleted	boolea

# Resource Configuration Parameters

8

ResourceCreateSet (p339) and ResourceSet (p366) accept an array of parameter values to create or update resource configurations used by *Hitachi ID Bravura Security Fabric*. These parameter values are also returned by ResourceCreateGet (p337). The following is a list of the parameters available for each resource type supported by the above API functions.

#### 8.1 Account Attribute Resource Type

This resource type accepts platform types as one of its configuration parameters. See Platform Type ID Values for the list of possible values.

name		description	required to create?	required to up- date?
ACCT	ATTR_ID	Identifier for the account attribute on the target system	yes	yes
ACCT	ATTR_GUID	Unique identifier for the account attribute at a particular override level	no	no
ACCT	ATTR_DATATYPE	The attribute data type; I=binary, B=boolean, F=memo, N=integer, or S=string	yes	no
ACCT	ATTR_OVERRIDE	The override scope of the account attribute; 0=default (no override), 1=override for all target systems of the given platform type, 2=override for the given target system.  Default account attributes cannot be created, but can be updated if they are overridden using ACCTATTR_OVERRIDE_NEW.	yes	yes

name	description	required to create?	required to up-date?
ACCTATTR_OVERRIDE_NEW	The new override scope of the existing account attribute; 1=override for all target systems of the given platform type, 2=override for the given target system. The override scope can be changed only between overridden and non-overridden status. Changes to the configuration of a default account attribute are not allowed unless it is overridden first or ACCTATTR_OVERRIDE_NEW is set to 1 or 2 simultaneously with the other configuration changes.	no	no
ACCTATTR_PLATFORM	The platform type; required if ACCTATTR_OVERRIDE=1, ignored if ACCTATTR_OVERRIDE=2	no	no
ACCTATTR_TARGET_ID	The target system ID; required if ACCTATTR_OVERRIDE=2, ignored if ACCTATTR_OVERRIDE=1	no	no
ACCTATTR_MIN_VALUES	Minimum required number of values; 0=optional, >0=the minimum required number	yes	no
ACCTATTR_MAX_VALUES	Maximum allowed number of values; -1=unlimited, >=0 =the maximum allowed number	yes	no
ACCTATTR_CREATE_ACTION	How should the attribute be created during a create accountoperation; I=ignore the attribute, C=copy attribute values from the model account, R=copy attribute values but replace the account, S=set the attribute to specific values or according to profile/request attributes	yes	no
ACCTATTR_UPDATE_ACTION	How should the attribute be created during an üpdate attributesöperation; I=ignore the attribute, S=set the attribute to specific values or according to profile/request attributes, C=set the attribute to specific values or according to profile/request attributes only when the profile attribute has changed	yes	no
ACCTATTR_SEQUENCE	Attribute creation sequence; <0=set upon account creation, 0=sequence not important for this attribute, >0=set after new account creation	yes	no

name	description	required to create?	required to up-date?
ACCTATTR_ENCODING	Encoding used to store value (if ACCTATTR_DATATYPE=I, an encoding must be used); N=no encoding, B=Base 64 encoding	yes	no
ACCTATTR_MAP	Map the account attribute to the given profile/request attribute	no	no
ACCTATTR_TRACK	Whether to track changes to attribute values, if ACCTATTR_LOAD is 1; 0=no (default), 1=yes	no	no
ACCTATTR_LOAD	Whether to load the account attribute values during auto discovery; 0=no (default), 1=yes (required if ACCTATTR_TRACK=1 or ACCTATTR_POPULATE=1)	no	no
ACCTATTR_POPULATE	Whether to populate the mapped profile attribute with values from the target system, if ACCTATTR_MAP is set and ACCTATTR_LOAD is 1; 0=do not populate (default), 1=populate	no	no
ACCTATTR_FIXED_VALUES	Values to which the account attribute should be set, supplied as a KVGroup of KVPairs, where each pair is of the format " <attributevalue>" = " <l p>", where L=literal value, and P=PSLang expression. Any previously assigned fixed values will be replaced by the new set; pass in an empty KVGroup to delete all previously assigned fixed values</l p></attributevalue>	no	no
ACCTATTR_PRIORITY	Priority relative to other account attributes mapped to the same profile attribute	no	no

## 8.2 Attribute Resource Type

name	description	required to create?	required to up- date?
ATTR_ID	A unique identifier for the attribute; built-in attribute IDs USERID, SHORTID, and FULLNAME are reserved	yes	yes
ATTR_DESC	Description of attribute seen by users	yes	no
ATTR_DATA_TYPE	The attribute data type; C=string, N=integer, B=boolean, M=memo, P=password, D=date/time, U=user, L=link, or F=file	yes	no
ATTR_MIN_REQUIRED	Minimum required number of values; 0=optional (default), >0=the minimum required number (must be 1 for boolean, memo, password, date/time, and file data types)	no	no
ATTR_VALIDATE_DATA	Whether to validate the link attribute value as a valid link, or the user attribute value as a valid profile ID; 0=do not validate (default for link), 1=validate (default for user)	no	no
ATTR_DISPLAY_TYPE	How to display the boolean, date/time, string or integer attribute; for boolean, C=checkbox, A=radio buttons, <empty value="">=drop-down (default); for date/time, D=date only (calendar), <empty value="">=date/time (default); for string or integer, B=drop-down, E=drop-down with two columns (not allowed if ATTR_MAX_ALLOWED is 1)</empty></empty>	no	no
ATTR_MAX_ALLOWED	Maximum number of values allowed (required for string, integer, user, and link data types); -1=unlimited, >0=the maximum allowed number; 1 for all data types other than string, integer, user, and link data types	no	no
ATTR_MAX_LEN	Maximum field length of an attribute value, up to 450 (required for string, integer, and password data types)	no	no
ATTR_UNIQUE	Whether the values for a multi-valued string, integer, or link attribute must be unique; 0=no, 1=yes (default)(must be 1 for boolean, memo, password, date/time, and user data types)	no	no

name	description	required to create?	required to up-date?
ATTR_EMAIL	Whether the attribute can be included in the information sent in email notifications; 0=cannot be included (default)(must always be the case for password and file data type attibutes), 1=can be included	no	no
ATTR_PROFILE_COMPARE	Whether the attribute can be included on the "Profile comparison page"; 0=cannot be included (default)(must always be the case for password data types), 1=can be included	no	no
ATTR_AUTHCHAIN	Whether the string, integer, password, or date/time attribute is allowed for authentication chains; 0=not allowed (default), 1=allowed	no	no
ATTR_REQUEST_ONLY	Whether the attribute is used for requests only and not saved with the user's profile; 0=saved with user's profile (default), 1=used for requests only	no	no
ATTR_TRACK	Whether to track changes to attribute values; 0=no (default), 1=yes	no	no
ATTR_CONFIRM	Whether users must re-type the string, integer, or password attribute value; 0=no (default)(must always be the case if ATTR_MAX_ALLOWED is -1 or greater than 1), 1=yes	no	no
ATTR_INVALIDATE	Whether an authorizer changing an attribute value will invalidate previous authorizations of a request; 0=no (default), 1=yes	no	no
ATTR_ADVANCED_SEARCH	Whether to include the attribute in advanced searches; 0=no, 1=yes (default)	no	no
ATTR_REPORT	Whether to include the attribute values in reports; 0=no, 1=yes (default)	no	no
ATTR_INPUT_DESC	Description, displayed to users, of the input format of values for string, integer, memo, and password data types	no	no
ATTR_INPUT_FORMAT	Format requirement of input values for string and password data types	no	no
ATTR_INPUT_REGEXP	Regular expression used to validate input values for string, integer, memo, and password data types; requires ATTR_INPUT_DESC to be set to a value if setting ATTRIBUTE_INPUT_REGEXP to an expression	no	no

name	description	required to create?	required to up- date?
ATTR_VALUE_PLUGIN	Plugin used to generate a list of restricted values for string and integer data types	no	no
ATTR_PARENT	Parent attribute of string or integer attribute	no	no
ATTR_DEFAULT_VALUES	Default values for the string, integer, or boolean data type attribute, supplied as a KVGroup of KVPairs, where each KVPair is of the format " <default value="">" = "", or " <parent actual="" attribute="" value="">" = " <default value="">" (supply an empty KVGroup to clear the current values); default boolean values must be either T, F, or N</default></parent></default>	no	no
ATTR_INHERIT_VALIDATE	Whether to inherit validation enforcement rules from the attribute group to which the attribute belongs; 0=no, 1=yes (default)	no	no
ATTR_CREATE_VALIDATE	Whether to enforce validation when creating new accounts, if ATTR_INHERIT_VALIDATE is 0; 0=no, 1=yes (default)	no	no
ATTR_UPDATE_VALIDATE	Validation behavior when updating existing accounts, if ATTR_INHERIT_VALIDATE is 0; NEVER=never enforce, THIS=enforce when updating values of the attribute, ALWAYS=always enforce (default)	no	no
ATTR_IMAGE_LINK	Whether to display a link or file data type as an image; 0=no (default), 1=yes	no	no
ATTR_POS_BOOL	Text to display for the positive value of a boolean data type attribute (required for boolean datatypes only)	no	no
ATTR_NEG_BOOL	Text to display for the negative value of a boolean data type attribute (required for boolean datatypes only)	no	no
ATTR_NONE_BOOL	Text to display for no value of a boolean data type attribute (required for boolean datatypes only)	no	no

name	description	required to create?	required to up- date?
ATTR_RESTRICTED_VALUES	Restricted values for string and integer data types, supplied as either a KVGroup of KVPairs, where each pair is of the format " <actual value="">" = " <displayed value="">", or a KVGroup of KVGroups, where each sub-group uses a parent attribute's actual value as its key and contains KVPairs for the restricted values of the current attribute. If <displayed value="">is an empty value, the actual value will be used as the displayed value. Any previously assigned restricted values will be replaced by the new set; pass in an empty KVGroup to delete all previously assigned restricted values</displayed></displayed></actual>	no	no
ATTR_RESTRICTED_VALUE_ORDER	Order in which restricted values for string and integer data types are listed for users; A=actual value order, D=displayed value order	no	no
ATTR_KEEP_CASE	Restricted values are case-sensitive; 0=no (default), 1=yes	no	no
ATTR_VCARD_PROP	Map to vCard property; <empty value="">(default), ADR, BDAY, EMAIL, FN, GENDER, GEO, IMPP, LANG, N, NICKNAME, NOTE, ORG, PHOTO, RELATED, ROLE, TEL;TYPE=cell, TEL;TYPE=fax, TEL;TYPE=home, TEL;TYPE=work, TITLE, TZ, UID, URL, XML</empty>	no	no
ATTR_SUBMIT_ONLY	Is this attribute editable only request creation; 0=no (default), 1=yes	no	no

## 8.3 Attribute Group Resource Type

name	description	required to create?	required to up- date?
ATTRGRP_ID	A unique identifier for the attribute group	yes	yes
ATTRGRP_DESC	Description of attribute group seen by users	yes	no
ATTRGRP_CREATE_VALIDATE	Whether to enforce validation when creating new accounts, if ATTR_INHERIT_VALIDATE of the attribute member is 0; 0=no, 1=yes (default)	no	no
ATTRGRP_UPDATE_VALIDATE	Validation behavior when updating existing accounts, if ATTR_INHERIT_VALIDATE of the attribute member is 0; NEVER=never enforce, THIS=enforce when updating values in this group, ALWAYS=always enforce (default)	no	no
ATTRGRP_NOTES_ABOVE	Notes above attribute	no	no
ATTRGRP_NOTES_BELOW	Notes below attribute	no	no
ATTRGRP_DISPLAY_TYPE	Where the group's attributes are displayed to users; M = main request or profile page, S = subsidiary page, N = hidden from users (default)	no	no
ATTRGRP_DISPLAY_ORDER	Relative display order	no	no
ATTRGRP_DISPLAY_OPER	Which operations a custom request should contain in order to display the group's attributes. Operations are specified as a KVGroup of KVPairs, where the key of each pair is the name of a request operation. Names of request operations are returned by WFRequestOperationTypes. Any previously assigned operations will be replaced by the new ones; pass in an empty KVGroup to delete all previously assigned operations. Ignored if only HiPM is installed. Some operations may not be supported if they are not supported by the installed product license	no	no

name	description	required to create?	required to up-date?
ATTRGRP_ACL	User group access control to the attribute group. ACLs are specified as a KVGroup of KVPairs, where each pair is of the format " <usergroupid>" = " <permission>", with <permission>being either R (read-only access), W (write-only access), RW (read and write access), or empty value (no access). Any previously assigned ACLs will be replaced by the new ones; pass in an empty KVGroup to delete all previously assigned ACLs</permission></permission></usergroupid>	no	no
ATTRGRP_MEMBERS	The attributes that belong to the attribute group. Attributes are specified as a KVGroup of KVPairs, where each pair is of the format " <attributeid>" = " <relativeorder>", with <relativeorder>being the order by which the attribute is listed in relation to the other attributes (must be an integer greater than 0, or an empty value (last position in ordering)). Any previously assigned members will be replaced by the new ones; pass in an empty KVGroup to delete all previously assigned members</relativeorder></relativeorder></attributeid>	no	no

## 8.4 Managed Group Resource Type

name	description	to	required to up-date?
MANAGED_GROUP_MGRPID	A unique internal identifier for the managed group	yes	yes

## 8.5 Managed account Resource Type

name	description	required to create?	required to up- date?
MACC_POLICYID	ID of the policy this account is on"	no	no
MACC_ISADMIN	Is administrator"	no	no
MACC_INVALID	Is valid account"	no	no
MACC_WORKSTNID	workstation netbios ID"	no	no
MACC_ACCOUNTNAME	The name of the account"	no	no

## 8.6 Network Resource Resource Type

name	description	to	required to up-date?
NETWORK_RESOURCE_NETRESID	A unique internal identifier for the network resource	yes	yes

## 8.7 Role Resource Type

name	description	required to create?	required to up-date?
ROLE_ID	Unique identifier for the role	yes	yes

### 8.8 Target Resource Type

name	description	required to create?	required to up- date?
TARGET_ID	A unique identifier for the new target system. The target system ID can contain letters (A-Za-z), digits (0-9), and other ASCII characters. The target system ID cannot contain the following characters: :*? <> "	yes	yes
TARGET_TYPE	The target type; M = manually-added target, T = discovery template	yes	no
TARGET_PLAT	The target system's platform type	yes	no
TARGET_DESC	The target system name that is displayed to users	yes	no
TARGET_ADDR	The address of the target system	yes	no

name	description	required to create?	required to up- date?
TARGET_CREDENTIALS	The administrator credentials of the target system. Use a KVGroup to contain one or more sub-KVGroups, where each sub-KVGroup is an administrator credential:  "" "" = { " <adminid1> " "" = { "PWD" = " <admin1pwd> " } " <adminidn> " "" = { "PWD" = " <admin1pwd> " } " <adminidn> " "" = { "PWD" = " <admin1pwd> " } }. To specify that an administrator credential is a system password, include the KVPair  "IS_SYS_PWD" = "1" in the KVGroup of that administrator credential. To specify that an administrator credential should be used to run the connector, include the KVPair  "RUN_AS" = "1" in the KVGroup of that administrator credential. To specify whether an administrator credential should be updated by the Privileged Access Manager, include the KVPair "UPDATED_BY_PAM" = "0" (false) in the KVGroup of that administrator credential; when not specified, the setting is true by default. (The following requires the TARGET_CREDENTIAL_ASSOCIATION system variable enabled) To associate the administrator credential with a managed password, include the KVPairs  "MANAGED_SYSTEM" = " <managedsystemid1> " "MANAGED_ACCOUNT" = " <managedacctid1> " " "MANAGED_ACCOUNT" = " <managedacctid1> " " "MANAGED_ACCOUNT" = " <managedacctid1> " " " "ANAGED_ACCOUNT" = " <managedacctid1> " " " " " " " " " " " " " " " " " "</managedacctid1></managedacctid1></managedacctid1></managedacctid1></managedsystemid1></admin1pwd></adminidn></admin1pwd></adminidn></admin1pwd></adminid1>	no	no
TARGET_URL	The URL of a web page containing a longer description of the target system	no	no
TARGET_PAM_AUTO_CREATE	Whether to configure this target system as a push-mode managed system in Privileged Access Manager; 1 = true (default if TARGET_TYPE = T), 0 = false	no	no
TARGET_MGRP_NRTYPE	CIFS = SMB Protocol for Active Directory DN (you will be managing access to network shares on an Active Directory DN target system), SMB = SMB Protocol (you will be managing access to network shares on an Active Directory target system), NRSHRPT = SharePoint Resource (you will be managing access to sites and documents on a SharePoint target system)	no	no

name	description	required to create?	required to up- date?
TARGET_CERTIFICATION	Whether this target system is included in a certification process; 1 = yes, 0 = no (default)	no	no
TARGET_USE_ID_FILTERS	Whether to exclude or include certain users and accounts via the use of ID filters; 1 = include, 0 = exclude (default)	no	no
TARGET_PWD_EXPIRY_CHECK	Whether to check for users on the target system whose passwords will soon expire or have already expired; 1 = yes (default if TARGET_TYPE = M), 0 = no. Cannot be set to 1 if TARGET_LIST_ATTR and TARGET_LIST_ACCT are not also set to 1	no	no
TARGET_SUB_HOST_PLUGIN	The name of the plugin to run if the target system represents a collection of actual target systems	no	no
TARGET_MGRP_BY_OWNER	How to manage groups automatically; 1 = manage only groups with owners, 0 = do not manage groups automatically (default), -1 = manage all groups, -2 = manage all groups, no approval required	no	no
TARGET_MGRP_INHERIT_AUTH_CFG	Whether to automatically configure the managed group's authorizers; 1 = yes, 0 = no (default)	no	no
TARGET_MGRP_INHERIT_IMPL_CFG	Whether to automatically configure the managed group's implementers; 1 = yes, 0 = no (default)	no	no
TARGET_CONNECTOR_TIMEOUT	The timeout, in seconds, for the connector; by default, 300 seconds	no	no
TARGET_LIST_TIMEOUT	The timeout, in seconds, for the list operation on the target system; by default, -1 (unlimited)	no	no
TARGET_LIST_MIN_SIZE	The minimum size, in bytes, of list files; by default, 50 bytes	no	no
TARGET_PROXIES	Proxy servers which can run connectors on behalf of the main server. List servers, separated by a semi-colon in the format: <server name="">/ <port number=""></port></server>	no	no
TARGET_PERSISTENTSERVER	Address of the server to run persistent list on. Should be left empty to use the local server.	no	no
TARGET_PERSISTENTPORT	Port of the server to run persistent list on1 will use the default.	no	no
TARGET_VERIFY_PWD	Whether the target system can be used for authentication; 1 = yes (default), 0 = no	no	no

name	description	required to create?	required to up-date?
TARGET_NEW_ID_UNIQUE	Whether to ensure new profile IDs do not conflict with IDs on this target system; 1 = yes (default when TARGET_TYPE = M), 0 = no	no	no
TARGET_CASE_SET	The program to use to set the case of a new ID for this target system; upper.pss = use all uppercase characters; lower.pss = use all lowercase characters (default)	no	no
TARGET_GROUP	The target system group to which the target system belongs; by default, DEFAULT (default target system group)	no	no
TARGET_PWD_CHG	Whether passwords can be changed on the target system; 1 = yes (default), 0 = no	no	no
TARGET_PWD_CHG_MUST_SELECT	Whether the target system must be selected for password operations; 1 = yes, 0 = no (default)	no	no
TARGET_UNLOCK	Whether users on the target system can be unlocked; $1 = yes$ (default), $0 = no$	no	no
TARGET_MUST_HAVE_ACCT	Whether profile users must have an account on the target system; 1 = yes, 0 = no (default)	no	no
TARGET_ALLOW_ATTACH_OTHER	Whether a profile user can attach manually a login ID from another user on an auto-associated target system; 1 = yes, 0 = no (false)	no	no
TARGET_ALLOW_DETACH_OTHER	Whether a profile user can detach manually-attached accounts; 1 = yes, 0 = no, -1 = obey PSL_ALLOW_DELETE option (default)	no	no
TARGET_CONTAINER_DN_ATTR	Profile or request attribute ID to use as the container DN when creating or moving accounts on context-sensitive target systems	no	no
TARGET_DISP_ATTACH_OTHER	Whether the target system will appear on the self-service login ID reconciliation page to allow profile users to attach users from this system; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no
TARGET_DISP_PERSONAL_INFO	Whether the target system will appear on the IDR user management page; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no

name	description	required to create?	required to up- date?
TARGET_DISP_PWD_CHG	Whether the target system will appear on the self-service 'Change passwords' page to allow profile users to change their passwords on this system; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no
TARGET_DISP_UNLOCK	Whether the target system will appear on the self-service 'Unlock accounts' page to allow profile users to unlock their accounts on this system; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no
TARGET_DISP_ADMIN_ATTACH_OTHER	Whether the target system will appear on the administrative login ID reconciliation page to allow help-desk users to attach users from this system to profiles; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no
TARGET_DISP_ADMIN_PWD_CHG	Whether the target system will appear on the assisted 'Password changes' page to allow help-desk users to change users' passwords on this system; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no
TARGET_DISP_ADMIN_UNLOCK	Whether the target system will apper on the user administration 'Unlock accounts' page to allow help-desk users to unlock accounts on this system; 1 = yes, 0 = no (default if TARGET_TYPE = T)	no	no
TARGET_DISCOVERY_OPTIONS	Additional resources to discover and load during auto discovery. Valid options are: Is_compsvr = load computer server objects, Is_compwkstn = load computer workstation objects, Is_scmacct = load service manager accounts, Is_taskacct = load scheduled task accounts, Is_iisacct = load IIS manager accounts, Is_comacct = load DCOM manager accounts, Is_admmember = load group members, Is_expression = load resources satisfying an expression, Is_manual = do not automatically discover resources to load, Is_normacct = enable all accounts to be discovered objects. Multiple discovery options should be separated by commas	no	no
TARGET_INCREMENTAL_LISTING	Whether incremental listing is allowed; 1 = yes (default), 0 = no	no	no
TARGET_PERSISTENTLIST	Whether persistent listing is enabled; $1 = yes$ (default), $0 = no$	no	no

name	description	required to create?	required to up-date?
TARGET_ENABLE	Whether target allows enabling accounts; 1 = yes (default), 0 = no	no	no

## 8.9 Template Resource Type

name	description	required to create?	required to up- date?
TEMPLATE_ID	A unique identifier for the template	yes	no
TEMPLATE_DESC	The description to display to users	yes	yes
TEMPLATE_TARGET	A unique identifier for the target system	yes	yes
TEMPLATE_ACCOUNT	The login ID of the account you want to use as a model or blueprint; required for account provisioning templates, optional for inventory templates	no	no
TEMPLATE_INVENTORY	Whether this is an inventory template; 1 = true, 0 = false (default)	no	no
TEMPLATE_LOCATION	A location for the template; required for inventory templates, optional for account provisioning templates	no	no
TEMPLATE_TYPE	A type for the template; required for inventory templates, optional for account provisioning templates	no	no
TEMPLATE_REQUIRE_PWD	Whether accounts created from this template do not require a password; 1 = true (default), 0 = false	no	no

## 8.10 User class Resource Type

name	description	required to create?	required to up-date?
UC_ID	Unique ID of class	yes	yes
UC_DESC	Description given to this class	yes	no
UC_SOURCE	Policy where the userclass can be referenced; [Shared] by default	no	no
UC_IS_DEPRECATED	Whether the user class is deprecated; 1 = true, 0 = false	no	no
UC_REASON	The reason for deprecating; if this is assigned to a non-empty value, then UC_IS_DEPRECATED should be set to true (1) at the same time	no	no
UC_PARTICIPANTS	Participant specifications assigned to the user class. Participant specifications are defined using the string form of a KVGroup containing one or more KVGroups, where each sub-KVGroup is a single participant specification of the following format: " <participant id="" specification="">" " <description of="" participant="" specification="">" = { "use_expr" = " <whether 0="" 1="use" expression="" expression,="" for="" listing;="" otherwise="" to="" use="">", "list_expr" = " <pslang expression="" for="" listing="">", "is_excl" = " <whether 0="" 1="true," are="" by="" class;="" expression="" listed="" members="" of="" otherwise="" sole="" the="" user="" users="">" }. The participant description and "use_expr" are required; "list_expr" and "is_excl" are required only if "use_expr" is set to 1. Setting this parameter will overwrite previous participant specifications.</whether></pslang></whether></description></participant>	no	no
UC_CRITERIA_PSLANG	PSLang expression criteria that user class participants must satisfy. The criteria are defined using the string form of a KVGroup containing one or more KVPairs, where each KVPair is of the form " <pslang expressions="">" = "". Setting this parameter will overwrite previous PSLang criteria specifications.</pslang>	no	no

name	description	required to create?	required to up-date?
UC_CRITERIA_GROUP	Managed group membership criteria that user class participants must satisfy. The criteria are defined using the string form of a KVGroup containing one or more KVGroups, where each sub-KVGroup is of the format " <target id="">" " <group id="">" = { "participant" = " <participant id="">" "ismember" = " &lt;1 or 0 &gt;" }, where "ismember" is whether membership or non-membership in the group determines membership in the user class. Setting this parameter will overwrite previous group criteria specifications.</participant></group></target>	no	no
UC_CRITERIA_PROFILE_ATTR	Profile attribute membership criteria that user class participants must satisfy. The criteria are defined using the string form of a KVGroup containing one or more KVGroups, where each sub-KVGroup is of the format " <any unique="" value="">" "" = { "participant" = " <participant id="">" "attribute" = " <pre></pre></participant></any>	no	no

## 8.11 User group Resource Type

name	description	required to create?	required to up- date?
UGRP_ID	Unique ID of user group	yes	yes
UGRP_POINTID	ID of the associated user class point. Must be either ACCESS_RULE_DELEGATED, ACCESS_RULE_GLOBAL, or ACCESS_RULE_SELF_SERVICE.	yes	yes
UGRP_DESC	Description given to this user group	yes	no
UGRP_RESET	"Change passwords" privilege	no	no
UGRP_RESETEXPIRE	"Change and expire passwords" privilege	no	no
UGRP_HDD	"Unlock encrypted systems/accounts" privilege	no	no
UGRP_UNLOCK	"Unlock accounts" privilege	no	no
UGRP_PROFILEENABLE	"Enable/Disable user profile" privilege	no	no
UGRP_PROFILEUNLOCK	"Unlock user profile" privilege	no	no
UGRP_VIEW	"View profile information" privilege	no	no
UGRP_VIEWACCT	"View accounts" privilege	no	no
UGRP_VIEWROLE	"View roles" privilege	no	no
UGRP_UPDATE	"Update account" privilege	no	no
UGRP_ADDROLE	"Add roles" privilege	no	no
UGRP_DELROLE	"Delete roles" privilege	no	no
UGRP_CREATE	"Create account" privilege	no	no
UGRP_ENABLE	"Enable account" privilege	no	no
UGRP_DISABLE	"Disable account" privilege	no	no
UGRP_DELETE	"Delete account" privilege	no	no
UGRP_MANAGEGROUPS	"Manage group memberships" privilege	no	no
UGRP_PPMREQREVOKE	"Revoke privileged access requests" privilege	no	no
UGRP_RENAME	"Rename account" privilege	no	no
UGRP_RENAMEPROFILE	"Rename profile" privilege	no	no
UGRP_MOVECTX	"Move user from one context to another" privilege	no	no
UGRP_VIEWREQOPEN	"View open requests" privilege	no	no
UGRP_VIEWREQCLOSED	"View archived requests" privilege	no	no
UGRP_VIEWHISTORY	"View profile history" privilege	no	no
UGRP_DELEGMANG	"Delegate workflow requests" privilege	no	no
UGRP_FLOWMANG	"Manage workflow requests" privilege	no	no

name	description	required to create?	required to up-date?
UGRP_DELEGATE	"Delegate authority" privilege	no	no
UGRP_EDITQA	"Update security questions" privilege	no	no
UGRP_VIEWQA	"View security questions" privilege	no	no
UGRP_BYPASSQA	"Bypass security questions" privilege	no	no
UGRP_EDITIDS	"Attach other accounts" privilege	no	no
UGRP_NETRES	"Request access to network resources" privilege	no	no
UGRP_VIEWORG	"Browse the OrgChart" privilege	no	no
UGRP_MANAGEORG	"View my subordinates" privilege	no	no
UGRP_PWDACCESS	"Request / Check out / Check in access" privilege	no	no
UGRP_SMONMANAGE	"Request to search all recorded sessions" privilege	no	no
UGRP_SMONSEARCH	"Search my recorded sessions" privilege	no	no
UGRP_SMONSEARCHOTHER	"Search all recorded sessions" privilege	no	no
UGRP_SMONVIEW	"Download recorded sessions" privilege	no	no
UGRP_SMONREMOVE	"Remove recorded session packages" privilege	no	no
UGRP_VIEWGROUPS	"Groups" privilege	no	no
UGRP_REGISTER	"Enable password synchronization" privilege	no	no
UGRP_IVRREG	"Generate voice print enrollment PIN" privilege	no	no
UGRP_TOKEN	"Manage tokens" privilege	no	no
UGRP_TRACKREQ	"Track request status" privilege	no	no
UGRP_ADHOCCERTIFY	"Initiate a review of all entitlements" privilege	no	no
UGRP_MOBILE	"Manage mobile devices" privilege	no	no
UGRP_PERSONALVAULT	"Manage personal vault" privilege	no	no
UGRP_SMONBROWSERVIEW	"View recorded sessions in browser" privilege	no	no
UGRP_EXTENDCHECKOUT	"Request check-out extensions" privilege	no	no
UGRP_VIEWWORKFLOW	"View only for workflow requests" privilege	no	no
UGRP_SHOWANS	"View answers to security questions" privilege	no	no

name	description	required to create?	required to up- date?
UGRP_CRITERIA_UC	User classes that determine membership to the user group. The criteria are defined using the string form of a KVGroup containing one or more sub-KVGroups, where each sub-KVGroup is of the format " <userclassid>" "" = { " <participantid1>" = <maptype> " <participantidn>" = <maptype>}, where <maptype>is either "RECIPIENT" or "REQUESTER" if UGRP_POINTID is ACCESS_RULE_DELEGATED; the contents of the sub-KVGroup are ignored if UGRP_POINTID is not ACCESS_RULE_DELEGATED. If there is more than one user class sub-KVGroup, then the name of the main KVGroup must be either "ANY" (participants must match any of the user classes) or "ALL" (participants must match all user classes). Setting this resource parameter will overwrite previous criteria specifications.</maptype></maptype></participantidn></maptype></participantid1></userclassid>	no	no

## 8.12 Workstation Resource Type

name	description	required to create?	required to up- date?
WORKSTATION_ID	Workstation netbios ID	yes	no
WORKSTATION_IP	Deprecated	no	no
WORKSTATION_NAME	Workstation description	yes	no
WORKSTATION_OSTYPE	Optional. A description of the operating system or other identifying characteristic of the new managed system	no	no
WORKSTATION_OSVERSION	Workstation/application version string (e.g Windows 2000 Server)	no	no
WORKSTATION_TYPE	Deprecated	no	no
WORKSTATION_URL	URL with resource information	no	no

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# Workflow Request Operations

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WFRequestOperationTypes (p742) returns a list of allowed operation types for assignment to workflow requests.

Note that the names of custom request operations are not listed in the table below. Currently, 99 custom request operations are supported, named consecutively *CUST1*, *CUST2*, ..., *CUST99*.

name	description
ACUA	Add account to user
ADDM	Add an entitlement as member of a configuration object
AEDEF	Request an exception to not have a required role member
AEDEFDEL	Remove an approved exception to not have a required role member
AESOD	Request an exception to a SoD rule
AESODDEL	Request removal of an exception to a SoD rule
AESODEXT	Extend expiry date of an exception to a SoD rule
AESUR	Request an exception to have a resource that the role doesn't require
AESURDEL	Remove an approved exception to have a resource that the role doesn't require
ARCHREQGRP	Obtain group membership
ARCHREQMAQ	View multiple passwords
ARCHREQPWD	View password
ARCH_EXTEND_CHECKOUT	Extend check-out duration
CFYA	Certify account
CFYAEDEF	Certify exception to deficit
CFYAESOD	Exception for segregation of duties rule
CFYAESUR	Certify exception to surplus
CFYG	Certify group membership
CFYNESODACCT	Account member included in an exception of a SOD rule
CFYNESODGRP	Group member included in an exception of a SOD rule
CFYNESODROLE	Role member included in an exception of a SOD rule
CFYPROFATTR	Certify profile attribute
CFYR	Certify role membership

name	description
CFYRSVSOD	Resolve segregation of duties violation
CFYSIGN	Configuration Certification signoff
CFYSODACCT	Resolve segregation of duties violation - account member
CFYSODGRP	Resolve segregation of duties violation - group member
CFYSODROLE	Resolve segregation of duties violation - role member
CFYSUBG	Certify sub-group group membership
CFYU	Certify profile
CRTC	Create configuration object
CRTG	Create group
DELC	Create configuration object
DELG	Delete group
DELM	Delete an entitlement member from a configuration object
DELR	Delete role
DELU	Delete account
DNAP	Disable profile
DNAU	Disable account
ENAP	Enable profile
ENAU	Enable account
GOGA	Add an owner group to a group
GOGD	Remove an owner group from a group
GOOD	Remove unknown owner from a group
GRBD	Remove unknown object from a group
GRGA	Add a group as a member of another group
GRGD	Remove a group as a member of another group
GROA	Add an owner to a group
GROD	Remove an owner from a group
GRPA	Add a parent group to a group
GRPD	Remove a parent group from a group
GRUA	Add a user to a group
GRUD	Remove a user from a group
GRUP	Update group
LDEL	Delete login association
LUPD	Update login association
MVCU	Move account from one context to another
NESOD	Entitlement to be included in an exception of a SOD rule
NESODDEL	Entitlement to be removed from an approved exception of a SC rule

name	description
NRAT	Network resource attributes
NRCR	Create a network resource
NRDL	Delete a network resource
NRMV	Move a network resource
NRUP	Update a network resource
OBJREL_ADD	Add object relation
OBJREL_CERTIFY	Certify object relation
OBJREL_DELETE	Delete object relation
OBJREL_UPDATE	Update object relation
OBJ_CERTIFY	Certify Object
OBJ_CREATE	Create Object
OBJ_DELETE	Delete Object
OBJ_DISABLE	Disable Object
OBJ_ENABLE	Enable Object
OBJ_RENAME	Rename Object
OBJ_UPDATE	Update Object
ORGADDMGR	Designate manager
ORGADDSUB	Attach subordinate
ORGDELMGR	Designate non-manager
ORGDELSUB	Detach subordinate
ORGSIGN	OrgChart building signoff
ORGTFRSUB	Transfer subordinate
ORGTFRSUBPULL	Transfer subordinate from another manager
PCHA	Account target for a generic PAM checkout request
PCHO	Generic PAM checkout request
RENU	Rename account
RLUA	Add role to user
RPRO	Rename profile
SERI	Server information
SM_BROWSER_VIEW	View a monitored session in a browser
SM_SEARCH	Search monitored sessions
SM_VIEW	View a monitored session
UMAD	Add explicit user as the userclass member
UMDE	Delete explicit user as the userclass member
UPAT	Update attributes
UPCO	Update configuration object
UPDT	Update account

name	description	
UPRT	Update resource attribute	
USRA	Create user	
VWAT	View profile	

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