IBM Systems - iSeries
SM1 APIs

Version 5 Release 4
Note
Before using this information and the product it supports, be sure to read the information in "Notices," on page 7.
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System Manager (SM1)

Two exit programs are documented for the System Manager licensed program (SM1). They are:

- "Authorization Exit Program" determines whether an activity is authorized to occur on the specified nodes.
- "Notification Exit Program" on page 3 notifies a user program of a change management activity result.

See the System Manager Use book for additional information.

APIs

These are the APIs for this category.

Authorization Exit Program

Required Parameter Group:

<table>
<thead>
<tr>
<th></th>
<th>Parameter</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Change request</td>
<td>Input</td>
<td>CHAR(10)</td>
</tr>
<tr>
<td>2</td>
<td>Sequence number</td>
<td>Input</td>
<td>BINARY(4)</td>
</tr>
<tr>
<td>3</td>
<td>Activity</td>
<td>Input</td>
<td>CHAR(10)</td>
</tr>
<tr>
<td>4</td>
<td>Activity type</td>
<td>Input</td>
<td>CHAR(10)</td>
</tr>
<tr>
<td>5</td>
<td>Transport type</td>
<td>Input</td>
<td>CHAR(10)</td>
</tr>
<tr>
<td>6</td>
<td>Change management verb</td>
<td>Input</td>
<td>CHAR(10)</td>
</tr>
<tr>
<td>7</td>
<td>Global name</td>
<td>Input</td>
<td>CHAR(64)</td>
</tr>
<tr>
<td>8</td>
<td>Destinations</td>
<td>Input</td>
<td>Array of CHAR(*)</td>
</tr>
<tr>
<td>9</td>
<td>Number of destinations</td>
<td>Input</td>
<td>BINARY(4)</td>
</tr>
<tr>
<td>10</td>
<td>User profile</td>
<td>Input</td>
<td>CHAR(10)</td>
</tr>
<tr>
<td>11</td>
<td>Authorization results</td>
<td>Output</td>
<td>Array of CHAR(4)</td>
</tr>
</tbody>
</table>

Exit point name: QIBM_QNS_SDDSTAUTH
Exit point format name: AUTH0100

The Authorization exit program determines whether an activity is authorized to occur on the specified nodes. This exit is called one or more times per activity before the distribution operation occurs. If the exit is called more than once, the list of nodes that are being checked is different each time. The exit determines if the activity should be allowed to run based on the criteria it specifies (that is, license information). The exit returns a value for each node indicating whether the activity may be performed.

The exit program is registered using the Add Exit Program (QUSADDEP) API and using QIBM_QNS_SDDSTAUTH as the exit point name, with format AUTH0100.

Required Parameter Group

Change request
   INPUT; CHAR(10)
   Change request name

Sequence number
   INPUT; BINARY(4)
   Sequence number of the change request
Activity
   INPUT; CHAR(10)
   Activity name

Activity type
   INPUT; CHAR(10)
   The type of activity that is being performed; for example, *OBJ or *PTF.

Transport type
   INPUT; CHAR(10)
   The method by which the object or request is sent to the managed system.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*SVDS</td>
<td>SNA/Distribution Services, queue type = *SVDS, is used to send the object or request when distributing using Change Management.</td>
</tr>
<tr>
<td>*SNADS</td>
<td>SNA/Distribution Services, queue type = *SNADS, is used to send the object or request when distributing using the Object Distribution Facility (ODF).</td>
</tr>
</tbody>
</table>

Change management verb
   INPUT; CHAR(10)
   The function to be performed by the managed system.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACC</td>
<td>Accept</td>
</tr>
<tr>
<td>*ACT</td>
<td>Activate</td>
</tr>
<tr>
<td>*DLT</td>
<td>Delete</td>
</tr>
<tr>
<td>*INI</td>
<td>Initiate</td>
</tr>
<tr>
<td>*INS</td>
<td>Install</td>
</tr>
<tr>
<td>*RMV</td>
<td>Remove</td>
</tr>
<tr>
<td>*RTV</td>
<td>Retrieve</td>
</tr>
<tr>
<td>*SND</td>
<td>Send</td>
</tr>
<tr>
<td>*SNDINI</td>
<td>Send and initiate</td>
</tr>
<tr>
<td>*SNDINS</td>
<td>Send and install</td>
</tr>
</tbody>
</table>

Global name
   INPUT; CHAR(64)
   The global name of the object that is to be manipulated.

Destinations
   INPUT; Array of CHAR(*)
   The destinations for the request. When the transport type is *SVDS or *SNADS, each destination element has the following format:

   | Network ID          | CHAR(8) |
   | Control point name  | CHAR(8) |
   | Reserved            | CHAR(4) |

Number of destinations
   INPUT; BINARY(4)
   The number of destinations for the distribution request.

User profile
   INPUT; CHAR(10)
   The user profile for which the distribution is being performed.
Authorization result
OUTPUT; Array of CHAR(4)
For each of the destinations, indicates whether the change management activity may be performed.
*YES
*NO

Error Messages
If an error message is generated by the Authorization exit program, the activity is not performed.

Notification Exit Program

Required Parameter Group:

1. Change request INPUT; CHAR(10)
2. Sequence number INPUT; BINARY(4)
3. Activity INPUT; CHAR(10)
4. Activity type INPUT; CHAR(10)
5. Transport type INPUT; CHAR(10)
6. Change management verb INPUT; CHAR(10)
7. Global name INPUT; CHAR(64)
8. Destinations INPUT; Array of CHAR(*)
9. Number of destinations INPUT; Array of BINARY(4)
10. User profile INPUT; CHAR(10)
11. Activity results INPUT; BINARY(4)

Exit point name: QIBM_QNS_SDDSTNTFY
Exit point format name: NTFY0100

The Notification exit program notifies a user program of a change management activity result.

The exit program is registered using the Add Exit Program (QUSADDEP) API and using QIBM_QNS_SDDSTNTFY as the exit point name, with format NTFY0100.

Required Parameter Group

Change request
INPUT; CHAR(10)
Change request name

Sequence number
INPUT; BINARY(4)
Sequence number of the change request

Activity
INPUT; CHAR(10)
Activity name

Activity type
INPUT; CHAR(10)
The type of activity that is being performed; for example, *OBJ or *PTF.

Transport type
INPUT; CHAR(10)
The method by which the object or request is sent to the managed system.
Value | Description
--- | ---
*SVDS | SNA/Distribution Services, queue type = *SVDS, is used to send the object or request when distributing using Change Management.

*SNADS | SNA/Distribution Services, queue type = *SNADS, is used to send the object or request when distributing using the Object Distribution Facility (ODF).

**Change management verb**

INPUT; CHAR(10)
The function to be performed by the managed system.

<table>
<thead>
<tr>
<th>Value</th>
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<tr>
<td>*ACC</td>
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<tr>
<td>*SNDINS</td>
<td>Send and install</td>
</tr>
</tbody>
</table>

**Global name**

INPUT; CHAR(64)
The global name of the object that is to be manipulated.

**Destinations**

INPUT; Array of CHAR(*)
The destinations for the request. If the transport type is *SVDS or SNADS, each destination element has the following format:

- **APPN Network ID**: CHAR(8)
- **APPN Control point name**: CHAR(8)
- **Reserved**: CHAR(4)

**Number of destinations**

INPUT; BINARY(4)
The number of destinations for the distribution request.

**User profile**

INPUT; CHAR(10)
The user profile for which the distribution is being performed.

**Activity result**

OUTPUT; Array of CHAR(4)
The end status for each destination node. It indicates whether the change management activity completed successfully.

- 0: Successful
- 0-9: Successful with warnings
- 10-89: Failed
- 90-99: Did not run due to conditions or schedules
**Usage Notes:**
Since activities may complete at different times for different nodes, this exit program may be called many times for different nodes.
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