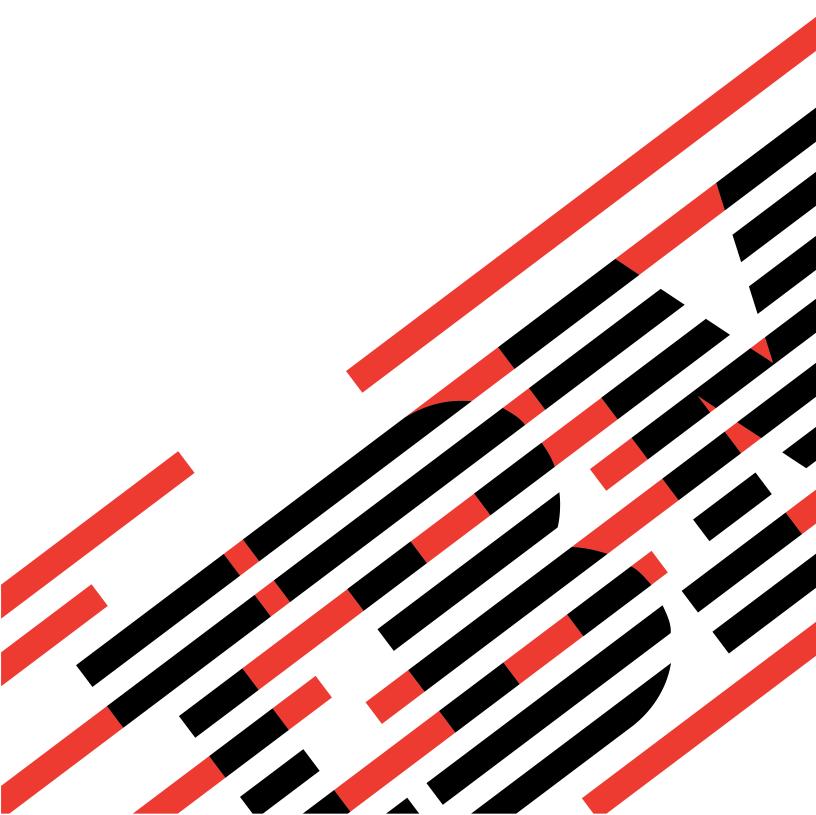




iSeries

SM1 APIs

Version 5 Release 3



IBM

@server

iSeries SM1 APIs

Version 5 Release 3

Note Before using this information and the product it supports, be sure to read the information in "Notices," on page 9.

Sixth Edition (August 2005)

This edition applies to version 5, release 3, modification 0 of Operating System/400 (product number 5722-SS1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CISC models.

© Copyright International Business Machines Corporation 1998, 2005. All rights reserved.
US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

System Manager (SM1)					1	Appendix. Notices 9
APIs					1	Trademarks
Authorization Exit Program .					2	Terms and conditions for downloading and printing
Required Parameter Group					2	publications
Error Messages					4	Code disclaimer information
Notification Exit Program					5	
Required Parameter Group					5	
Usage Notes:					7	

System Manager (SM1)

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

- "Authorization Exit Program" on page 2 determines whether an activity is authorized to occur on the specified nodes.
- "Notification Exit Program" on page 5 notifies a user program of a change management activity result.



See the System Manager Use book for additional information.

APIs by category

APIs

These are the APIs for this category.

Authorization Exit Program

Required Parameter Group: Change request Input CHAR(10) Sequence number Input BINARY(4) Activity Input CHAR(10) Activity type Input CHAR(10) Transport type Input CHAR(10) Change management verb Input CHAR(10) Global name Input CHAR(64) Destinations Input Array of CHAR(*) Number of destinations Input BINARY(4) User profile Input CHAR(10) Authorization results Output Array of CHAR(4) 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.

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.

Value	Description
*ACC	Accept
*ACT	Activate
*DLT	Delete
*INI	Initiate
*INS	Install
*RMV	Remove
*RTV	Retrieve
*SND	Send

*SNDINI Send and initiate *SNDINS Send and install

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.

Top | "System Manager (SM1)," on page 1 | APIs by category

Notification Exit Program

```
Required Parameter Group:
       Change request
Input
       CHAR(10)
       Sequence number
Input
       BINARY(4)
       Activity
Input
       CHAR(10)
        Activity type
       CHAR(10)
Input
       Transport type
Input
       CHAR(10)
       Change management verb
Input
       CHAR(10)
       Global name
Input
       CHAR(64)
       Destinations
Input
       Array of CHAR(*)
       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.

Value	Description
*ACC	Accept
*ACT	Activate
*DLT	Delete
*INI	Initiate
*INS	Install
*RMV	Remove
*RTV	Retrieve
*SND	Send
*SNDINI	Send and initiate

*SNDINI Send and initiate *SNDINS Send and install

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.

Top | "System Manager (SM1)," on page 1 | APIs by category

Appendix. Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation Licensing 2-31 Roppongi 3-chome, Minato-ku Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
Software Interoperability Coordinator, Department YBWA
3605 Highway 52 N
Rochester, MN 55901
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this information and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, IBM License Agreement for Machine Code, or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

Advanced 36

Advanced Function Printing

Advanced Peer-to-Peer Networking

AFP

AIX

AS/400

COBOL/400

CUA

DB2

DB2 Universal Database

Distributed Relational Database Architecture

Domino

DPI

10 iSeries: SM1 APIs

DRDA

eServer

GDDM

IBM

Integrated Language Environment

Intelligent Printer Data Stream

IPDS

iSeries

Lotus Notes

MVS

Netfinity

Net.Data

NetView

Notes

OfficeVision

Operating System/2

Operating System/400

OS/2

OS/400

PartnerWorld

PowerPC

PrintManager

Print Services Facility

RISC System/6000

RPG/400

RS/6000

SAA

SecureWay

System/36

System/370

System/38

System/390

VisualAge

WebSphere

xSeries

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, and service names may be trademarks or service marks of others.

Terms and conditions for downloading and printing publications

Permissions for the use of the information you have selected for download are granted subject to the following terms and conditions and your indication of acceptance thereof.

Personal Use: You may reproduce this information for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative works of this information, or any portion thereof, without the express consent of IBM^(R).

Commercial Use: You may reproduce, distribute and display this information solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of this information, or reproduce, distribute or display this information or any portion thereof outside your enterprise, without the express consent of IBM.

Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the information or any data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the information is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations. IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THIS INFORMATION. THE INFORMATION IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

All material copyrighted by IBM Corporation.

By downloading or printing information from this site, you have indicated your agreement with these terms and conditions.

Code disclaimer information

This document contains programming examples.

SUBJECT TO ANY STATUTORY WARRANTIES WHICH CANNOT BE EXCLUDED, IBM^(R), ITS PROGRAM DEVELOPERS AND SUPPLIERS MAKE NO WARRANTIES OR CONDITIONS EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, REGARDING THE PROGRAM OR TECHNICAL SUPPORT, IF ANY.

UNDER NO CIRCUMSTANCES IS IBM, ITS PROGRAM DEVELOPERS OR SUPPLIERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY:

- 1. LOSS OF, OR DAMAGE TO, DATA;
- 2. SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR
- 3. LOST PROFITS, BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO SOME OR ALL OF THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

IBM

Printed in USA