



System i  
Programming  
User Application APIs

*Version 6 Release 1*







System i  
Programming  
User Application APIs

*Version 6 Release 1*

**Note**

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

This edition applies to version 6, release 1, modification 0 of IBM i5/OS (product number 5761-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, 2008. All rights reserved.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

<b>User Application APIs . . . . .</b>	<b>1</b>
APIs . . . . .	1
Remove User Application Information	
(QsyRemoveUserApplicationInfo) API . . . . .	1
Authorities and Locks . . . . .	1
Required Parameter Group . . . . .	1
Error Messages . . . . .	2
Retrieve User Application Information	
(QsyRetrieveUserApplicationInfo) API . . . . .	2
Authorities and Locks . . . . .	3
Required Parameter Group . . . . .	3
Receiver Variable Description . . . . .	4
Format of Returned Records Feedback Information	4

Field Descriptions . . . . .	4
Error Messages . . . . .	5
Update User Application Information	
(QsyUpdateUserApplicationInfo) API . . . . .	5
Authorities and Locks . . . . .	6
Required Parameter Group . . . . .	6
Error Messages . . . . .	7

<b>Appendix. Notices . . . . .</b>	<b>9</b>
Programming interface information . . . . .	10
Trademarks . . . . .	11
Terms and conditions . . . . .	12



---

## User Application APIs

The user application APIs provide support for working with application information in user profiles.

The user application APIs are:

- “Remove User Application Information (QsyRemoveUserApplicationInfo) API” (QsyRemoveUserApplicationInfo) removes the specified application information from the specified user profile.
- “Retrieve User Application Information (QsyRetrieveUserApplicationInfo) API” on page 2 (QsyRetrieveUserApplicationInfo) returns a list of application information entries for a user profile.
- “Update User Application Information (QsyUpdateUserApplicationInfo) API” on page 5 (QsyUpdateUserApplicationInfo) updates the specified application information for a user profile.

APIs by category

---

### APIs

These are the APIs for this category.

---

#### Remove User Application Information (QsyRemoveUserApplicationInfo) API

Syntax for QsyRemoveUserApplicationInfo:

```
#include <qsyusrin.h>

void QsyRemoveUserApplicationInfo
(char          *User_profile,
 char          *Application_information_ID,
 int          *Length_of_application_information_ID,
 void         *Error_code);
```

Service Program: QSYUSRIN  
Default Public Authority: \*USE  
Threadsafe: No

The Remove User Application Information (QsyRemoveUserApplicationInfo) API removes the specified application information from the specified user profile.

The Change User Profile exit programs are not called from this API.

#### Authorities and Locks

If the user profile parameter is not \*CURRENT or the user profile currently running, then the user profile that calls this API must have \*SECADM special authority and \*OBJMGT and \*USE authorities to the user profile.

#### Required Parameter Group

**User profile**

INPUT; CHAR(10)

The user profile for which the application information will be removed. The special value \*CURRENT may be specified to remove application information for the user profile that calls this API.

### Application information ID

INPUT; CHAR(\*)

The ID for the application information to be removed. The following can be specified for the application information ID:

#### generic\*

All application information IDs that have IDs beginning with the generic string will be removed.

#### application information ID

Specific application information ID will be removed.

### Length of application information ID

INPUT; BINARY(4)

The length of the application information ID that is specified in the application information ID parameter. The length of the application information ID must be a value from 1 to 200.

### Error code

I/O; CHAR(\*)

The structure in which to return error information. For the format of the structure, see Error code parameter.

## Error Messages

Message ID	Error Message Text
CPF2204 E	User profile &1 not found.
CPF2213 E	Not able to allocate user profile &1.
CPF226C E	Not authorized to perform function.
CPF3CF1 E	Error code parameter not valid.
CPF3CF2 E	Error(s) occurred during running of &1 API.
CPF3C1D E	Length specified in parameter &1 not valid.
CPF3C90 E	Literal value cannot be changed.
CPF4AA2 E	Application information ID &1 does not exist.
CPF9872 E	Program or service program &1 in library &2 ended. Reason code &3.

API introduced: V5R3

[Top](#) | [“User Application APIs,” on page 1](#) | [APIs by category](#)

---

## Retrieve User Application Information (QsyRetrieveUserApplicationInfo) API

Syntax for QsyRetrieveUserApplicationInfo:

```
#include <qsyusrin.h>

void QsyRetrieveUserApplicationInfo
    (void          *Receiver_variable,
     int           *Length_of_receiver_variable,
     void          *Return_records_feedback_information,
     char          *Format_name,
```



```
char      *User_profile,  
char      *Application_information_ID,  
int       *Length_of_application_information_ID,  
void      *Error_code);
```

Service Program: QSYUSRIN  
Default Public Authority: \*USE  
Threadsafe: No

The Retrieve User Application Information (QsyRetrieveUserApplicationInfo) API returns a list of application information entries for a user profile.

## Authorities and Locks

*User Profile Authority*  
\*READ

## Required Parameter Group

### Receiver variable

OUTPUT; CHAR(\*)

The receiver variable that receives the information requested. You can specify the size of the area to be smaller than the format requested as long as you specify the length parameter correctly. As a result, the API returns only the data that the area can hold.

### Length of receiver variable

INPUT; BINARY(4)

The length of the receiver variable provided. The length of receiver variable parameter may be specified up to the size of the receiver variable specified in the user program. If the length of receiver variable parameter specified is larger than the allocated size of the receiver variable specified in the user program, the results are not predictable.

### Returned records feedback information

OUTPUT; CHAR(12)

Information about the entries that are returned in the receiver variable.

See "Format of Returned Records Feedback Information" on page 4 for details.

### Format name

INPUT; CHAR(8)

The name of the format that is used to retrieve application information entries for the user profile.

You can specify this format:

*RUAI0100* For a detailed description of this format, see "RUAI0100 Format" on page 4.

### User profile

INPUT; CHAR(10)

The name of the user profile for which the application information will be retrieved. The special value \*CURRENT may be specified to retrieve application information for the user profile that calls this API.

### Application information ID

INPUT; CHAR(\*)

The ID for the application information to retrieve. The following can be specified for the application information ID:

### generic\*

All application information IDs that have IDs beginning with the generic string will be retrieved.

### application information ID

Specific application information ID will be retrieved.

### Length of application information ID

INPUT; BINARY(4)

The length of the application information ID. The length of the application information ID may be from 1 to 200.

### Error code

I/O; CHAR(\*)

The structure in which to return error information. For the format of the structure, see Error code parameter.

## Receiver Variable Description

The following tables describe the order and format of the data returned in the receiver variable. For detailed descriptions of the fields in the tables, see "Field Descriptions."

### RUAI0100 Format

Offset		Type	Field
Dec	Hex		
0	0	BINARY(4)	Length of entry
4	4	CHAR(200)	Application information ID
204	CC	BINARY(4)	Displacement to user application information
208	D0	BINARY(4)	Length of user application information
212	D4	BINARY(4)	CCSID of user application information
216	D8	CHAR(6)	First valid release
		CHAR(*)	User application information

## Format of Returned Records Feedback Information

Offset		Type	Field
Dec	Hex		
0	0	BINARY(4)	Bytes returned
4	4	BINARY(4)	Bytes available
8	8	BINARY(4)	Number of user application information entries

## Field Descriptions

**Application information ID.** The application information ID that identifies this entry.

**Bytes available.** The number of bytes of data available to be returned to the user in the receiver variable. If all data is returned, bytes available is the same as the number of bytes returned. If the receiver variable

was not large enough to contain all of the data, this value is estimated based on the total number of application information entries for the user profile and the format specified.

**Bytes returned.** The number of bytes of data returned to the user in the receiver variable. This is the lesser of the number of bytes available to be returned or the length of the receiver variable.

**CCSID of user application information.** The CCSID of the user application information. This will be the default job CCSID of the job that last updated the user application information.

**Displacement to user application information.** The displacement in the entry to the start of the user application information.

**First valid release.** The first release that this application information is valid. This field will be in the format VxRxMx (for example, V5R3M0).

**Length of entry.** The length (in bytes) of the current entry. This length can be used to access the next entry.

**Length of user application information.** The length (in bytes) of the user application information.

**Number of user application information entries.** The number of complete entries returned in the list of user application information entries. A value of zero is returned if the list is empty.

**User application information.** The user application information that is associated with the user profile.

## Error Messages

Message ID	Error Message Text
CPFA0AA E	Error occurred while attempting to obtain space.
CPF2204 E	User profile &1 not found.
CPF2213 E	Not able to allocate user profile &1.
CPF2217 E	Not authorized to user profile &1.
CPF2222 E	Storage limit is greater than specified for user profile &1.
CPF3CF1 E	Error code parameter not valid.
CPF3CF2 E	Error(s) occurred during running of &1 API.
CPF3C1D E	Length specified in parameter &1 not valid.
CPF3C21 E	Format name &1 is not valid.
CPF3C90 E	Literal value cannot be changed.
CPF9872 E	Program or service program &1 in library &2 ended. Reason code &3.

API introduced: V5R3

[Top](#) | [“User Application APIs,” on page 1](#) | [APIs by category](#)

---

## Update User Application Information (QsyUpdateUserApplicationInfo) API

Syntax for QsyUpdateUserApplicationInfo:

```
#include <qsyusrin.h>

void QsyUpdateUserApplicationInfo
(char          *User_profile,
 char          *Application_information_ID,
 int          *Length_of_application_information_ID,
```

```

char      *Application_information,
int       *Length_of_application_information,
char      *First_valid_release,
void      *Error_code);

```

Service Program: QSYUSRIN  
 Default Public Authority: \*USE  
 Threadsafe: No

The Update User Application Information (QsyUpdateUserApplicationInfo) API updates the specified application information for a user profile. The specified information is stored in an object that is saved and restored with the user profile.

The Change User Profile exit programs are not called from this API.

## Authorities and Locks

If the user profile parameter is not \*CURRENT or the user profile currently running, then the user profile that calls this API must have \*SECADM special authority and \*OBJMGT and \*USE authorities to the user profile.

## Required Parameter Group

### User profile

INPUT; CHAR(10)

The user profile for which the application information will be updated. The special value \*CURRENT may be specified to update application information for the user profile that calls this API.

### Application information ID

INPUT; CHAR(\*)

The ID for the application information entry to update. IBM-supplied i5/OS<sup>®</sup> application information IDs are named QIBM\_ccc\_name, where ccc is the component identifier. User-supplied application information IDs should not preface their application information ID with QIBM. User-supplied application information IDs should start with the company name to eliminate most problems that involve unique names. Application information IDs should use an underscore (\_) to separate parts of the name. Also, IDs for related applications should start with the same name.

The first character of the application information ID must be one of the following:

A-Z          Uppercase A-Z

The remaining characters in the application information ID must be made up of the following characters:

A-Z          Uppercase A-Z  
 0-9          Digits 0-9  
 .            Period  
 \_            Underscore

### Length of application information ID

INPUT; BINARY(4)

The length of the application information ID that is specified in the application information ID parameter. The length of the application information ID must be a value from 1 to 200.

### Application information

INPUT; CHAR(\*)

The application information to be associated with the specified user profile.

### **Length of application information**

INPUT; BINARY(4)

The length of the application information that is specified in the application information parameter. The length of the application information must be a value from 1 to 1700.

### **First valid release**

INPUT; CHAR(6)

The first release that this application information is valid. This field is used to determine the earliest release this user application information is valid when saving a user profile to a previous release. If the user profile is saved to a release previous to the release specified in this field, this information will not be saved with the user profile information. This field must be in the format VxRxMx (for example, V5R3M0). The release specified must be V5R3M0 or greater.

### **Error code**

I/O; CHAR(\*)

The structure in which to return error information. For the format of the structure, see Error code parameter.

## **Error Messages**

<b>Message ID</b>	<b>Error Message Text</b>
CPF2204 E	User profile &1 not found.
CPF2213 E	Not able to allocate user profile &1.
CPF2222 E	Storage limit is greater than specified for user profile &1.
CPF226C E	Not authorized to perform function.
CPF3CF1 E	Error code parameter not valid.
CPF3CF2 E	Error(s) occurred during running of &1 API.
CPF3C1D E	Length specified in parameter &1 not valid.
CPF3C90 E	Literal value cannot be changed.
CPF4AA0 E	Application information ID &1 not valid.
CPF4AA1 E	First release value &1 not valid.
CPF9872 E	Program or service program &1 in library &2 ended. Reason code &3.

API introduced: V5R3

[Top](#) | [“User Application APIs,” 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 document 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.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

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.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. \_enter the year or years\_. All rights reserved.

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

---

## Programming interface information

This API descriptions publication documents intended Programming Interfaces that allow the customer to write programs to obtain the services of IBM i5/OS.



---

## Trademarks

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

Advanced 36  
Advanced Function Presentation  
Advanced Peer-to-Peer Networking  
AFP  
AIX  
AnyNet  
AS/400  
BCOCA  
C/400  
COBOL/400  
Common User Access  
CUA  
DB2  
DB2 Universal Database  
Distributed Relational Database Architecture  
Domino  
DPI  
DRDA  
Enterprise Storage Server  
eServer  
FlashCopy  
GDDM  
i5/OS  
IBM  
IBM (logo)  
InfoColor  
Infoprint  
Integrated Language Environment  
Intelligent Printer Data Stream  
IPDS  
Lotus  
Lotus Notes  
MO:DCA  
MVS  
Net.Data  
NetServer  
Notes  
OfficeVision  
Operating System/2  
Operating System/400  
OS/2  
OS/400  
PartnerWorld  
POWER5+  
PowerPC  
Print Services Facility  
PrintManager  
PROFS  
RISC System/6000  
RPG/400  
RS/6000

SAA  
SecureWay  
SOM  
System i  
System i5  
System Object Model  
System/36  
System/38  
System/390  
TotalStorage  
VisualAge  
WebSphere  
xSeries  
z/OS

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

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, or service names may be trademarks or service marks of others.

---

## Terms and conditions

Permissions for the use of these publications is granted subject to the following terms and conditions.

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

**Commercial Use:** You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications 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 publications or any information, 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 publications 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 THESE PUBLICATIONS. THE PUBLICATIONS ARE 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.







Printed in USA