

Welcome to Extreme Support on the iSeries and AS/400.

In V4R5, one of the new Extreme Support functions offered is to send collected data to IBM for support and analysis. Through Extreme Support, iSeries and AS/400 delivers secure, personalized service and electronic support that is designed to help you keep your business running at peak performance. Through automated support, online tracking of service and proactive maintenance, iSeries and AS/400 offers support customized to your unique system environment. For more information on Extreme Support, see: <http://www.as400service.ibm.com/>

This function is available in PTF **SF64660 (5798RZG)**. If you require assistance with ordering this PTF:

USA: Call 1-800-237-5511, and choose the AS/400 menu option to speak with a support representative.

Outside USA: Contact the local support center in your country for assistance.

This PTF will automatically order all additional PTFs to obtain this new function on your system. These PTFs are for the Base Operating System (5769-SS1), PM/400 (5769-PM1), and Electronic Service Agent (5798-RZG). PM/400 must be installed and activated if you want PM/400 data transmitted via the Universal Connection. For information on PM/400, see: <http://www.ibm.com/eserver/iseries/pm400>

Important! Do NOT permanently apply these PTFs if you ever plan to change your primary language.

Note: The Management Central server must be ended before the 5769-SS1 PTFs can be applied immediate. To end the Management Central server, use command `ENDTCPSVR SERVER(*MGTC)`. To restart the Management Central server, use command `STRTCPSVR SERVER(*MGTC)`.

Note: If the primary language of your system is a Double-Byte Coded Character Set (DBCS) language, ensure that PTF **SF65478 (5769JC1)** is installed. (Examples of DBCS languages are Japanese, Chinese, and Korean.)

Summary of steps

- I. Check prerequisites
- II. Complete prerequisite setup steps
- III. Setup Service Agent
- IV. Create a system group
- V. Setup, select and send an inventory collection
- VI. Verify the inventory collection

I. Check prerequisites

1. Verify the OS/400 version and release level is Version 4, Release 5.
2. You must have ***SECOFR** authority with ***ALLOBJ** and ***IOSYSCFG** special authority in your iSeries or AS/400 user profile to setup Service Agent. To check or change your security authorities, use command **WRKUSRPRF user profile**.

Important! A user **without** ***ALLOBJ** authority would need to have specific authority to these objects to setup Service Agent AND to collect and send inventory data to IBM. See the table below for the specific authorities required:

Object	Library	Object type	Authority required
Use GRTOBJAUT for these objects:			
QSARTVINV	QSVCDRCTR	*PGM	*USE
QSVCDRCTR	QSYS	*LIB	*USE
QA1PONE	QMPGLIB	*FILE	*CHANGE
QMARIGS	QSYS	*PGM	*USE
QSASENDER	QSVCDRCTR	*PGM	*USE
QTOCCNNINF	QSYS	*SRVPGM	*USE
QSASRVID	QUSRSYS	*VLDL	*CHANGE
QAYIVSYS	QUSRSYS	*FILE	*USE
QAYIVHDW	QUSRSYS	*FILE	*USE
QAYIVSFW	QUSRSYS	*FILE	*USE
QAYIVPTF	QUSRSYS	*FILE	*USE
QAYIVRIG	QUSRSYS	*FILE	*CHANGE
QYPSSRVS	QSYS	*SRVPGM	*USE
QUSRSYS	QSYS	*LIB	*CHANGE
QASA*	QSVCDRCTR	*FILE	*CHANGE
*ALL	QSVCDRCTR	*SRVPGM	*USE
QSVCDRCTR	QSVCDRCTR	*ALL	*USE
AUDITLOG	QSVCDRCTR	*FILE	*CHANGE
QSAVFCNN	QSVCDRCTR	*PGM	*USE
QYPSSTRS	QSYS	*PGM	*USE
Use CHGAUT for these objects:			
qibm/proddata/sa400/esrvagt.jar	n/a	n/a	*RX
qibm/proddata/sa400	n/a	n/a	*RX

3. You **must** have **V4R5 Client Access Express for Windows (5769-XE1)** with **Service Pack 2 (5769-XE1 SF64217)** or a later Service Pack installed. These Service packs contain the **Universal Connection Wizard** which will be used to configure your Universal Connection. The Service Packs are available for download at: <http://www.ibm.com/servers/eserver/iseries/clientaccess/> or may be ordered as a PTF.

Note: The Universal Connection Wizard is part of the optionally installed Network component. You must have this component installed in order to install the Wizard.

If you install Service Pack 2 (SF64217), you must also install additional files available for download at the Client Access Express for Windows FTP site at: <ftp://ftp.software.ibm.com/as400/products/clientaccess/win32/v4r5m0/files/mgmtctrl>

Read the readme.txt file located at this site and follow its instructions.

Note: If you installed a Service Pack later than SF64217, you do not need to download the additional files. Their content is included in Service Pack levels after SF64217.

For help in connecting your Windows PC to your AS/400 system, consult **Client Access Express for Windows - Setup, SC41-5507**.

4. You must have **V4R5 AS/400 Toolbox for Java (5769-JC1)** installed.

Note: This is a preloaded licensed product. If you upgraded your system to V4R5, this product can be found on **CD (B29XX_03)** that came with your software upgrade package. Use command RSTLICPGM to install this product.

5. You must have IBM Electronic Service Agent for iSeries and AS/400, release 4.5 installed.

Note: System value **QRETSVRSEC** on your iSeries or AS/400 **must** be set to **'1'**. To check or change this system value, use command **WRKSYSVAL QRETSVRSEC**.

A. Type **DSPSFWRSC** on an iSeries or AS/400 command line and press **Enter**. A list of software resources is displayed.

B. Press **F11** to display libraries/releases. Press **Page Down** until you locate product ID **5798RZG** under the **Resource ID** column. **Example:** V4R5M0 signifies that Electronic Service Agent 4.5 is installed.

If Service Agent is installed and the release is V4R5M0, go to the section: **'Complete prerequisite setup steps'**.

If Service Agent is not installed or the release is not V4R5M0:

- **IN THE UNITED STATES:** Call 1-800-879-2755, and take option 1 for the National Publications Support Center to order an **IBM Electronic Service Agent for AS/400 CD (SK3T-5141)**.

- **OUTSIDE UNITED STATES:** Contact the local support center in your country for assistance to order an **IBM Electronic Service Agent for AS/400 CD (SK3T-5141)**.

Once you receive the CD, do this:

- 1) Insert the CD into the CD-ROM device.

Important! If your system is located in **Thailand**, the job **CCSID** must be changed before you install Electronic Service Agent for AS/400. To change the job to the new value, do this:

Type **DSPJOB OPTION(*DFNA)** on a command line and press **Enter**.

Locate and write down the **Coded character set identifier** value. You will need this value for a later step. Press **Enter**.

Type **CHGJOB CCSID(838)** on a command line and press **Enter**. Continue to the next step.

- 2) Type **LODRUN DEV(XXXXX)** on a command line (where **XXXXX** is the name of the iSeries or AS/400 CD-ROM device) and press **Enter**.

- 3) From the **Service Director Activation Menu**, press **F3** to exit.

Important! If your system is located in **Thailand**, the job **CCSID** must be changed back to its original value (now that you have finished installing Electronic Service Agent for AS/400). To change the job back to the original value, do this:

Type **CHGJOB CCSID(____)** on a command line and press **Enter**.

(Type the original **CCSID (____)** value you wrote down in Step 3 above).

Continue to the next step.

- 4) Remove the CD from the CD-ROM device and continue to the next section.

II. Complete prerequisite set up steps

1. Verify that TCP/IP is started on your iSeries or AS/400.

TCP/IP is shipped as part of the base IBM Operating System/400. TCP/IP must be started if you are to send Service Agent system information to IBM. If TCP/IP is not running on your system, type **STRTCP** on a command line and press **Enter** to start it.

2. Increase Maximum transmission unit (MTU) on iSeries or AS/400.

To enhance system performance, it is recommended to increase the maximum transmission unit (MTU) size on the TCP/IP loopback interface.

- A. Sign on to your system that is the same as your central system in Management Central using a 5250 emulator.
- B. Type **NETSTAT *IFC** on a command line and press **Enter**.
- C. From the **Work with TCP/IP Interface Status** menu, select option 10 (End) to end the 127.0.0.1 Internet Address Interface (Line Description is *LOOPBACK) and press **Enter**. Press **Enter** to confirm your choice. Press **F3** to exit.
- D. Type **CFGTCP** on a command line and press **Enter**.
- E. From the **Configure TCP/IP** menu, type the option number for **Work with TCP/IP interfaces** and press **Enter**.
- F. From the **Work with TCP/IP Interfaces** menu, select option 2 (Change) to change the 127.0.0.1 Internet Address Interface (Line Description is *LOOPBACK) and press **Enter**.
- G. Change the **Maximum transmission unit** parameter (MTU) to 16388 and press **Enter**. Press **F3** twice to exit.
- H. Type **NETSTAT *IFC** on a command line and press **Enter**.
- I. From the **Work with TCP/IP Interface Status** menu, select option 9 (Start) to start the 127.0.0.1 Internet Address Interface (Line Description is *LOOPBACK) and press **Enter**. Press **F3** to exit.

3. Create an iSeries or AS/400 **locale** object.

As an iSeries or AS/400 Java requirement, you must create an iSeries or AS/400 locale object to have the current time on your system match your time zone. A locale is an object that can determine how data is processed, printed and displayed. Locales are made up of categories that define language, cultural data

and character sets. The LC_TOD category of an iSeries or AS400 locale contains the time zone name fields, which must be set to the same value that matches your time zone. To create an iSeries or AS/400 locale to format the LC_TOD category for your time zone, do this:

See “Configuring AS/400 for the AS/400 Developer Kit for Java – Time zone configuration” at:

<http://publib.boulder.ibm.com/html/as400/v4r5/ic2924/index.htm?info/java/rzaha/config.htm>

At this URL skip to the details on how to create a locale and format the tname field. When you click on the AS/400 International Application Development, SC41-5603 book, go to Chapter 4. and reference ‘Creating a Locale’. Follow steps 1 through 5.

Important! When completing step 3, the tname cannot be "<C><E><N><T><R><A><L>" as the example indicates. Use a three-character time zone designator for your specific locale. An example would be "<C><S><T>" for Central Standard Time.

Note: The same locale object may be distributed to other endpoints in the same time zone and used to set the QLOCALE system value. This is done by defining a Management Central software package containing the locale and setting the QLOCALE system value and then sending the package to the endpoints. This capability is found under Packages and Products in Management Central.

4. Ensure you use an appropriate installed adapter.

Note: Only PPP connections are supported in OS/400 V4R5.

Choose one of the following required adapters:

- **2699*** : Two-line WAN IOA. **Note:** This IOA requires either a **2629** LAN/WAN/Workstation IOP or a MFIOP.
- **2720*** : PCI WAN/Twinaxial IOA
- **2721*** : PCI Two-line WAN IOA
- **2745*** : PCI Two-line WAN IOA (replaces IOA 2721)
- **2761** : Eight-port analog modem IOA
- **2771** : Two-port WAN IOA, with a V.90 integrated modem on port 1 and a standard communications interface on port 2. To use port 2 of the 2771 adapter, an external modem with the appropriate cable is required.

* These adapters require an external V.24 modem, and the appropriate cable.

5. Verify that an asynchronous modem with an attached phone line is available.

It is recommended that ECS be configured to use TCP/IP. Two available scenarios:

- **Internal modem** – An internal modem (2771) is shipped with new V4R5M0 systems. To use the internal modem to run ECS over TCP/IP, Universal Connection PTF (SF64124) must be installed and configured. If you want more information on the internal modem, contact your marketing representative.
- **External asynchronous modem** – An IBM 7855, IBM 7857, IBM 7858 or an IBM 7852-400 can be used as an external asynchronous modem. This may require changing dip-switches or other hardware settings. Refer to your modem manual for more information. To use one of these external asynchronous modems to run ECS over TCP/IP, Universal Connection PTF (SF64124) must be installed and configured.

Note: If you will be using a non-IBM modem, any asynchronous modem that supports the RS232 serial interface and the V.34/V.42 protocol (V.90 is optional) can be used for this function. Typically, the default modem setting for DSR (Data Set Ready) must be overridden. For an iSeries or AS/400 system to detect a hang-up, DSR must be set to follow CD (Carrier Detect). Refer to your modem manual for more information.

To continue using ECS over SNA, the two available scenarios are:

- **Sharing one modem** - If you will be sharing the modem with applications requiring synchronous mode operation of the modem, you must use a dual model **IBM 7852-400** modem (this modem supports switching between synchronous and asynchronous modes).
- **Using separate modems** - If you have an **IBM 7855, IBM 7857, or IBM 7858** modem, then you must use separate modems for Service Agent and any other application that requires synchronous operation of the modem.

The special instructions to configure the **Universal Connection for TCP/IP ECS Support** are located in PTF cover letter SF64124. This PTF was automatically downloaded when PTF SF64660 was ordered (previous step). It is **recommended** that you read **all** of the information provided in the cover letter and either follow its steps to configure the Universal Connection using the Universal Connection Wizard OR the instructions provided below which **ONLY** step you through the wizard (all other detailed information is located in the cover letter).

The Universal Connection for TCP/IP ECS Support must be configured using Client Access.

Note: If you have already configured ECS to use the Universal Connection, skip to section III. – Setup Service Agent.

- A. Open **Client Access**.
- B. Open **IBM Operations Navigator**.
- C. Expand **My AS/400 Connections**. Go to the system connection under “**My AS/400 Connections**” that is your central system in Management Central. **Sign on**.
- D. Expand **Network**.
- E. Expand **Point-to-Point**.
- F. Right-click on **Connection Profiles**. Select **Universal Connection Wizard** to begin the configuration process.
- G. Read the **AS/400 Configure Universal Connection Wizard** text and click **Next**.
- H. Enter your **service contact information** (same as WRKCNTINF) and click **Next**.
- I. Enter your **service contact mailing address**, appropriate **National language version**, and desired **media for PTFs** and click **Next**.
- J. Enter the **country** where your AS/400 is located (and state or province where applicable) and click **Next**.
- K. Select the **Electronic customer support (ECS) connection** button and click **Next**.
- L. Select a **hardware resource** and click **Next**.
- M. Select a **line** and click **Next**.

If the hardware resource you selected in the previous step (L.) has no lines defined, this panel will ask you to specify a new line name and description. If the resource has more than one line defined, you will be asked to either select one of the existing from a list or create a new line (in which case you will see the same panel as above). If the resource had one and only one line defined then that line will be used.

- N. Select the nearest **location** to your AS/400 from the available list and an appropriate **primary phone number**. Click **Next**.

If you are unable to find an appropriate primary phone number, you can identify a number by accessing this web site and clicking on your appropriate country:

Internet: <http://www.attbusiness.net/hlpctr/accessnum.html>

Note: It is important to add any required prefixes to the phone number once it has been selected.

- O. Select a **backup phone number** from the available list and click **Next**.

Note: It is important to add any required prefixes to the phone number once it has been selected.

- P. Select a **modem** and click **Next**.

Note: If no appropriate modem selection exists or if you must modify some of the default parameters for your particular situation or modem, the modem list can be modified by either clicking on Modems (found under Point-to-Point) or by CL on your iSeries or AS/400 with command CFGTCPPTP (use option 11 to Work with modem information).

Note: You may not be asked to select a modem if the resource selected in step L was an internal modem resource.

- Q. Verify the choices you have made during the configuration process. If you need to make any changes, click **Back**. If the information is correct, click **Finish**.

- R. Select **YES** to test the **Universal Connection**. This will verify that the configuration has been **successfully completed**.

This does **NOT** actually connect to IBM. This will start the PPP Profile and verify that the dial is successful to AT&T Global Network Services.

Note: The Universal Connection Wizard can be run again later to modify the configuration, if necessary.

III. Setup Service Agent

1. Sign on to your system that is the same as your central system in Management Central using a 5250 emulator.

Note: System value **QCNTYID** on your iSeries or AS/400 **must** be set correctly for your country. To check or change this system value, use command **WRKSYSVAL QCNTYID**.

Note: System value **QRETSVRSEC** on your iSeries or AS/400 **must** be set to **'1'**. To check or change this system value, use command **WRKSYSVAL QRETSVRSEC**.

2. Type **GO SERVICE** on a command line and press **Enter**.
3. From the **Service Director Activation Menu** or the **Service Director Main Menu**, type the option number for the **Service Agent Main Menu** and press **Enter**.
4. If displayed, read the **International License Agreement for Services Programs**. Press **F6** to accept this agreement.
5. If displayed, read the **AS/400 Service Director Data Collection and Usage** agreement. Press **F6** to accept this agreement.

Note: Subsystem QSVCDRCTR **must** be active for Service Agent to function properly. Service Agent adds autostart job entry QYSDAJE to the QSYS/QSYSWRK subsystem description, which automatically starts this subsystem at IPL time.

6. The **SERVICE AGENT MAIN MENU** is displayed. The Service Agent communications setup and connections must be configured using **Client Access**. Go to the next step.

Important! The following steps are very similar to the instructions to configure the Universal Connection for TCP/IP ECS Support. You must continue with each of the following steps to setup Service Agent.

7. Open **Client Access**.
8. Open **IBM Operations Navigator**.
9. Expand **My AS/400 Connections**. Go to the system connection under **"My AS/400 Connections"** that is your central system in Management Central. **Sign on**.

10. Expand the system connection that is your **central system in Management Central** and **sign on**.
11. Expand **Network**.
12. Expand **Point-to-Point**.
13. Right-click on **Connection Profiles**. Select **Universal Connection Wizard**.
14. Read the AS/400 **Configure Universal Connection Wizard** text and click **Next**.
15. Enter your **service contact information** (same as WRKCNTINF) and click **Next**.

Note: Information previously entered when the ECS Connection was configured will be displayed.

16. Enter your **service contact mailing address**, appropriate **National language version**, and desired **media for PTFs** and click **Next**.
17. Enter the **country** where your AS/400 is located (and state or province where applicable) and click **Next**.
18. Select the **Electronic Service Agent for AS/400** button and click **Next**.
19. Select a **hardware resource** and click **Next**.

Only PPP connections are supported in OS/400 V4R5M0. Reference section '**Complete prerequisite set up steps**' for the list of appropriate adapters.

20. Select a **line** and click **Next**.

If the hardware resource you selected in the previous step (#19) has no lines defined, this panel will ask you to specify a new line name and description. If the resource has more than one line defined, you will be asked to either select one of the existing from a list or create a new line (in which case you will see the same panel as above). If the resource had one and only one line defined then that line will be used.

21. Select the nearest **location** to your iSeries or AS/400 from the available list and an appropriate **primary phone number**. Click **Next**.

If you are unable to find an appropriate primary phone number, you can identify a number by accessing this web site and clicking on your appropriate country:

Internet: <http://www.attbusiness.net/hlpctr/accessnum.html>

Note: It is important to add any required prefixes to the phone number once it has been selected.

22. Select a **backup phone number** from the available list and click **Next**.

Note: It is important to add any required prefixes to the phone number once it has been selected.

23. Select a **modem** and click **Next**.

Note: If no appropriate modem selection exists or if you must modify some of the default parameters for your particular situation or modem, the modem list can be modified by either clicking on Modems (found under Point-to-Point) or by CL on your iSeries 400 or AS/400e with command CFGTCPPTP (use option 11 to Work with modem information).

Note: You may not be asked to select a modem if the resource selected in step L was an internal modem resource.

24. Verify the choices you have made during the configuration process. If you need to make any changes, click **Back**. If the information is correct, click **Finish**.

25. Select **YES** to test the **Universal Connection**. This will verify that the configuration has been **successfully completed**.

This does **NOT** connect to IBM. This will start the PPP Profile and verify that the dial is successful to AT&T Global Network Services.

The Universal Connection Wizard is finished.

Note: The Universal Connection Wizard can be run again later to modify the configuration, if necessary.

IV. Create a system group

Note: If you are scheduling for only a single system, go to section: **‘To setup, select and send an inventory collection’**.

The systems from which you wish to collect inventory data can be defined in a Management Central System Group to simplify the task of scheduling for several systems. To create a System Group, using an Operations Navigator window, do this:

1. Expand **Management Central**. Sign on to the system that is your central system, if necessary.
2. Right-click on **AS/400 System Groups**. Select **New System Group**.
3. Enter a **Name** and **Description** for this new system group. Select **endpoint systems** from the **Available systems** list and use the **Add** button to add them to the list of **Selected systems**. Click **OK**.

Note: System value **QCNTYID** on each **endpoint** iSeries or AS/400 **must** be set correctly for your country. To check or change this system value, use command **WRKSYSVAL QCNTYID**.

V. Setup, select and send an inventory collection

To setup, select and send an Inventory Collection, using an Operations Navigator window, do this:

Important! Service Agent will not process inventory for systems that are **V4R4 or below**.

1. Expand **Management Central**. Sign on to the system that is your central system, if necessary.
2. Expand **AS/400 Endpoint Systems** or **AS/400 System Groups**. Right-click on either the endpoint or the group for which you would like to collect and send inventory. Select **Inventory** and choose **Collect**.
3. Select the inventory you would like to collect and send to IBM. To maximize IBM's ability to service you better, you are recommended to select the following inventories:
 - Hardware
 - Software
 - Fixes
 - CONTACT INFORMATION
 - NETWORK ATTRIBUTES
 - SERVICE ATTRIBUTES
 - SYSTEM VALUES
 - PM/400 PERFORMANCE DATA

Important! **PM/400** must be installed and activated if you want PM/400 data transmitted. If you select PM/400 PERFORMANCE DATA and PM/400 is not

installed and activated for a system, all collections will fail for that system. If you would like to transmit PM/400 data for some systems and not for others, you will need to create a separate task to collect just the PM/400 PERFORMANCE DATA. You could also organize your PM/400 and non-PM/400 systems into separate system groups and then schedule separate tasks for each group.

4. Select the '**SEND ELECTRONIC SERVICE AGENT INVENTORY TO IBM**' action to run.
5. Click **Schedule**. From the Management Central Scheduler panel, schedule the frequency, date, and time to run the inventory collection and send to IBM task.

Note: The recommended frequency is daily. Your inventory collection will run as you have specified under 'When to run' and 'Date and Time to start'. When the inventory collection is finished, the data will be sent to IBM.

6. Select **OK**.

Note: Your inventory collection information can be viewed by expanding **Management Central** and selecting **Scheduled Tasks**.

VI. Verify the inventory collection

To verify a successful inventory collection, using an Operations Navigator window, do this:

Note: If the scheduled task (inventory collection) has not run, there will be no data to view.

1. Expand **Management Central** and **sign on** to the system that is your central system.
2. Click **Task Activity**. In the right pane you will see all tasks that have previously run or tasks that are currently running.
3. Locate the inventory task you would like to verify. Right-click on the task and select **Status**.

The Status window shows the overall status of the inventory collection and the status on each endpoint system in your system group.

The Status window does **NOT** verify that data was sent to IBM. To verify that data was sent to IBM, do this:

- A. Sign on to your system that is the same as your central system in Management Central using a 5250 emulator.
- B. Type **GO SERVICE** on a command line and press **Enter**.
- C. From the **Service Director Activation Menu** or the **Service Director Main Menu**, type the option number for the **Service Agent Main Menu** and press **Enter**.
- D. From the **Service Agent Main Menu**, type the option number for the **DISPLAY SERVICE DATA COLLECTORS** and press **Enter**.
- E. To view the list of Service Collectors, enter your specific system name, and press **Enter**.

Additional information

For information on **Electronic Service Agent**, see:
http://publib.boulder.ibm.com/as400_sd/sdsadoc.html

For information on **Management Central**, see:
<http://www.iseries.ibm.com/sftsol/mgmtcentral.htm>

For information on **PM/400**, see:
<http://www.ibm.com/eserver/series/pm400>

For information on **Electronic Services**, see:
<http://www.ibm.com/services/electronic/>