Documentation Library

aXes Full Function Trial Installation Guide

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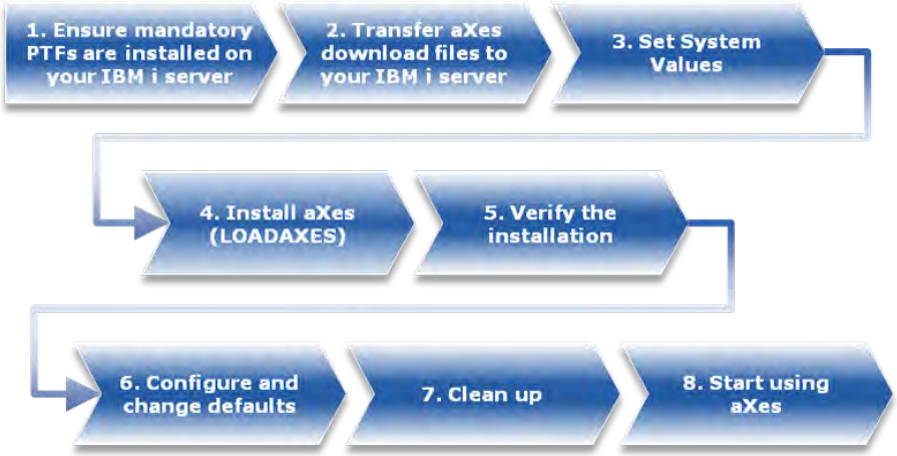
Installation Process

The rapid full function install process consists of the following steps.



Prerequisites

Before you start the installation process you need the prerequisite items.

Prerequisite Items
An aXes download file
Mandatory PTFs applied on your IBM i server
Port number(s) you wish to use with aXes

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Installation steps

Step 1: apply mandatory PTFs

If your IBM i server runs this SLIC version	You must have these PTFs applied	IBM PTF Description
V5R4M0	SI35079 5722SS1	OSP-TCP-INCORROUT QTVOPNVT ignores initial pgm, menu, curlib with Key 8
	MF40520 5722999	LIC-MSGCPF3888 *PGM, *SRVPGM and *MODULE restore from future
	SI43347 5722SS1	OSP-F/QDBSIGEX-T/QDBXREF2-MSGCPF501B QDBSRVXR2 LOOPING, CPF5
V5R4M5	SI35079 5722SS1	OSP-TCP-INCORROUT QTVOPNVT ignores initial pgm, menu, curlib with Key 8
	MF42655 5722999	LIC-MSGCPF3888 *PGM, *SRVPGM and *MODULE restore from future
	SI43347 5722SS1	OSP-F/QDBSIGEX-T/QDBXREF2-MSGCPF501B QDBSRVXR2 LOOPING, CPF5
V6R1	MF53662 5761999	LIC-COMM-TCPIP-UNPRED UNPREDICTABLE RESULTS WITH INCORRECTLY
V6R1M1	MF53664 5761999	LIC-COMM-TCPIP-UNPRED UNPREDICTABLE RESULTS WITH INCORRECTLY
V7R1	MF53665 5770999	LIC-COMM-TCPIP-UNPRED UNPREDICTABLE RESULTS WITH INCORRECTLY

If you keep up your IBM i CUME levels then you probably have applied these PTFs already - but it is worth taking a few minutes to check. You can find PTF details using Google.

To check if a PTF is installed use DSPPTF, for example:

```
DSPPTF LICPGM(5722SS1) SELECT(SI35079)
```

Confirm that the PTF has a status of temporarily or permanently applied.

If you apply a PTF after aXes has been installed, you need to stop and restart all aXes server jobs.

Setting up Attention key and System Request key on V6R1 and above systems

If you are installing aXes onto a machine with IBM i at V6R1 or greater and you need aXes to support the use of the Attention Key and/or the System Request keys during this evaluation, you need to refer to the aXesQuickStart guide Section 2 – Install aXes - Setting ATT key and SYS Req key for V6R1 and above.

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Step 2: Transfer downloaded save file to your IBM i server

You will need approximately 150 MB of disk space on your PC to download and unzip:

1.	Download the aXes zip file to your PC and unzip it on your PC using your preferred unzip tool.
2.	Transfer the decompressed save file to your server via FTP: 2.1 Start a command prompt window. 2.2 Change to the directory containing the save file. 2.3 Start FTP to your server and transfer the save file by issuing the following commands, replacing the words 'host-system', 'user-profile', and 'password' with appropriate values for your environment: FTP host-system user-profile password quote site namefmt 1 cd /QSYS.LIB/QGPL.LIB bin prompt put axestrial.savf quit

If the IBM i FTP server is not running, start it using the command STRTCPSVR *FTP. You must have authority to use the command.

Step 3: Set server system values

Sign on to the server as QSECOFR or a user with QSECOFR group authority.

Ensure these system values are as shown:

System Value	Required Value
QFRCCVNRST	0
QVFYOBJRST	1
QUTCOFFSET	Must be set to something
QAUTOVRT	A large number or *NOMAX
QALWOBJRST	*ALL

If you need to change these values you can change them back after aXes has been installed.

There is no need to IPL the system.

For more information about these system values, refer to the aXes Quick Start Guide.

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Step 4: Install aXes using the command LOADAXES

Issue these commands:

RSTOBJ OBJ(*ALL) SAVLIB(QTEMP) DEV(*SAVF) SAVF(QGPL/AXESTRIAL) RSTLIB(QTEMP)

ADDLIBLE QTEMP (if QTEMP is not on your library list)

For non-DBCS (Double Byte Character Set) systems, use this command:

LOADAXES REPLACERLS(*ONLY) LIBRARY(AXES) DIRECTORY('/axes') LNG(2924) LANGLIBE(*SAME)

For DBCS (Double Byte Character Set) systems, use this command:

LOADAXES REPLACERLS(*ONLY) LIBRARY(AXES) DIRECTORY('/axes') LNG(2984) LANGLIBE(*SAME)

Where:

LIBRARY	The name of the aXes product library and must not exist. The default name is AXES.
DIRECTORY	The name of aXes product IFS path name and must not exist. The default name is /axes.
LNG	LNG is the Primary Language Code. For non-DBCS systems, LNG defaults to 2924. For DBCS systems, LNG defaults to 2984. Consult Table 1: Language Codes and change the default language code where appropriate.
LANGLIBE	The name of the secondary language library into which the secondary language objects are restored. The default is to *SAME.

Table 1: Language Codes

Language Code	Language
2924	English Uppercase and Lowercase. Use when installing on a Single-Byte Character Set (SBCS) system for which no translated version of aXes is provided.
2938	English Uppercase Support for Double-Byte Character Set (DBCS). Use this value when installing on a DBCS system for which no translated version of aXes is provided and the system does not support lower-case English characters (for example Katakana-Kanji).
2950	English Uppercase
2984	English Uppercase and Lowercase Support for Double-Byte Character Set (DBCS). Use this value when installing on a DBCS system for which no translated version of aXes is provided.

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LongRange

Add the parameter LNGRNGY(*YES) to the LOADAXES command to also install the LongRange product.

Refer to the LongRange product documentation for more details.

Step 5: Verify aXes installed successfully

To verify that all the options were installed, do the following:

- From a command line, type GO LICPGM and take option 10.
- This will display the list of installed licensed programs.
- Page up or down to locate the Licensed Program name 1AXES01 and check the install status.

The list below is an example of a successful install:

Licensed Program	Status	Description
1AXES01	*INSTALLED	aXes Base
1AXES01	*INSTALLED	aXes Terminal Server
1AXES01	*INSTALLED	aXes Application Server
1AXES01	*INSTALLED	aXes Spooler File Server
1AXES01	*INSTALLED	aXes Examples

Step 6: Configure and change shipped defaults

Set the library list:

For non-English languages:

ADDLIBLE AXES**xxxx**

This is the name of the language library used in the LANGLIBE parameter when installing. If *SAME was used the name will be AXES**xxxx** where **xxxx** is the language code.

Change the AXES Job description library list to include this library.

Then, for all languages, do this:

ADDLIBLE AXES (or the equivalent AXES product library)

Set aXes to start with the subsystem

Type GO CMDAXES

Select option 10. Change aXes application server:

- Change parameter instance to AXES
- Change the last parameter AUTOSTART SERVER to *YES
- Press Enter.

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Change the default port number

If you are not already in the aXes menu use GO CMDAXES:

Ensure aXes default port 80 is not in use. To check try this in a web browser:

http://**<yourhostname>**:80

If the port number is in use, you need to use another port:

Select option 39. Work with aXes Servers:

- Press Enter
- Use option 22 (Edit configuration) against the aXes server *AXESW3
- Locate the line containing # Port=80, remove the # character and update to the required port number
- F3 Save/Exit

Make sure the port number is not blocked by web browser default configurations. At http://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers is a list of registered TCP/IP ports. We recommend any port number greater than 1023 and not listed in the Wikipedia list (e.g.: 8085) or listed with Status = Unofficial (e.g.: 8081).

Also check http://www.iana.org/assignments/port-numbers to ensure the port number is not well known or registered.

Changing the default CCSIDs:

Usually changing the default CCSIDs is not necessary.

If required, please refer to the aXes configuration change examples at the end of this document.

Step 7: Clean up after the install

Delete the installation material on the server:

DLTF QGPL/AXESTRIAL

Also delete the installation files on your PC.

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Step 8: Start using an aXes 5250 Session in a browser

Ensure you have applied all mandatory PTFs (see Step 1: Apply mandatory PTFs).

If you have a customized IBM i sign on screen and you experience problems signing on to aXes, please contact aXes support for assistance.

Start aXes with the command STRSBS AXES/AXES

Once the autostart jobs have completed, launch AXES from your browser:

http://**<host name>**:**<port number>**/wba/home.html

host name = the name of your server or its IP Address

port number = the port number required to access your server

Mouse over the resulting options to investigate them.

> The default username/password combination for the server status options is admin/admin, and dev/dev for the development terminal session link on the right.
>
> You should change these values using the instructions in the aXes User Guide in Section 5 - Managing aXes Users.

To ensure that terminal sessions open in the same Internet Explorer window, make sure that these tabbed Browser settings are selected in Internet Options:

Always open pop ups in a new tab.

Always switch to new tabs when they are created.

Try the shipped demonstration system

Try out the shipped demonstration system using the Basic Terminal Session link.

Sign on with a valid user profile and a password which is authorized for the library AXESDEMO

Add the library AXESDEMO to the library list by entering the following command on the command line:

ADDLIBLE AXESDEMO

Now start the simple demonstration application by entering the following command:

CALL XHRRPGTRN

Start enhancing 5250 screens by using the Tutorials link and then the Tutorial 0 – Getting Started link.

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How to change aXes configurations

Please refer to the aXes Quick Start Guide for information about:

- Installing aXes
- How to configure the aXes configuration file.

Contact your local vendor regarding the license options or for further information about aXes.

Changing the default CCSIDs

While it should not be necessary, the following examples show changes that you may choose to make to the aXes default CCSIDs for aXes Terminal Server, aXes Data Explorer or aXes Spooler File Server files.

For further details refer to aXes Reference Guide.

Changing the configuration file - aXes Terminal Server

English example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 65535
QCHRID	= 697 / 37
QCHRIDCTL	= *DEVD
QCNTRYID	= US/AU
QLANGID	= ENG

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French example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 65535
QCHRID	= 697 / 297
QCHRIDCTL	= *DEVD
QCNTRYID	= FR
QLANGID	= FRA

Japanese example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 5035 (DBCS)
QCHRID	= 1172 / 1027
QCHRIDCTL	= *DEVD
QCNTRYID	= JP
QLANGID	= JPN

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Thai (English) example

The job details are as follows but the requirement is to display in Thai (English):

Language identifier	ENG
Country or region identifier	US
Coded character set identifier	65535
Default coded character set identifier	37

Select option 39. Work with aXes Servers

Use option 22 (Edit configuration) against the aXes server *AXESTS

Locate the line containing HostCCSID and DefaultKeyboardType and change them to:

HostCCSID = 838

DefaultKeyboardType=THB

Press F3 Save/Exit

Changing the configuration file - aXes Data Explorer

English example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 65535
QCHRID	= 697 / 37
QCHRIDCTL	= *DEVD
QCNTRYID	= US/AU
QLANGID	= ENG

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French example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 65535
QCHRID	= 697 / 297
QCHRIDCTL	= *DEVD
QCNTRYID	= FR
QLANGID	= FRA

Select option 39. Work with aXes Servers

Use option 22 (Edit configuration) against the aXes server *AXESTS

Locate the line containing HostCCSID and change it to:

HostCCSID = 37

Press F3 Save/Exit

Japanese example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 5035 (DBCS)
QCHRID	= 1172 / 1027
QCHRIDCTL	= *DEVD
QCNTRYID	= JP
QLANGID	= JPN

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Changing the configuration file - aXes Spool File Server

English example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 65535
QCHRID	= 697 / 37
QCHRIDCTL	= *DEVD
QCNTRYID	= US/AU
QLANGID	= ENG

French example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 65535
QCHRID	= 697 / 297
QCHRIDCTL	= *DEVD
QCNTRYID	= FR
QLANGID	= FRA

Select option 39. Work with aXes Servers

Use option 22 (Edit configuration) against the aXes server *AXESTS

Locate the line containing HostCCSID and change it to:

HostCCSID = 297

Press F3 Save/Exit

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Japanese example

The job details are as follows:

Language identifier	*SYSVAL
Country or region identifier	*SYSVAL
Coded character set identifier	*SYSVAL
Default coded character set identifier	*SYSVAL

System values are:

QCCSID	= 5035 (DBCS)
QCHRID	= 1172 / 1027
QCHRIDCTL	= *DEVD
QCNTRYID	= JP
QLANGID	= JPN

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