# Release Notes for WebWare Server 4.9

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## GENERAL

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### RELEASE INFORMATION

**Release Name**

**Release Information**

**Release Date**

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### KNOWN PRODUCT LIMITATIONS

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General

Thank you for purchasing WebWare Server. This file contains release notes for WebWare Server 4.9 and includes last minute information that could not make it into the product documentation. It also contains tips and information regarding known problems which can help you to get the most out of WebWare Server.

We recommend that you review this document before installing and using WebWare Server.
Release Information

**Release Name**

The release name is WebWare Server 4.9

The release contains the following components:

- WebWare Server 4.9.0180
- WebWare Client 4.9.0180
- Interlink Module 4.9.0180
- SPL 2.1

**Release Information**

The information should be considered as last minutes information and most up-to-date.

**Release Date**

The release date is **2009-01-15**
Supported Platforms

The following section lists the hardware and software requirements for WebWare Server 4.9. Adding our recommended hardware and software components to the required components will maximize system performance and reliability in both large and small systems.

**IMPORTANT:** All Data Collectors and the WebWare Server must have valid trust relationships established in the domain to operate properly. Contact your server administrator to configure the proper trust relationship.

### Computer Hardware and Software Requirements

#### Server Computer Hardware and Software Requirements

The table below details the requirements for the network server computer.

To install WebWare Server, you must be a system administrator with an administrator password. Before you install WebWare Server, make sure your system conforms to the following requirements:

<table>
<thead>
<tr>
<th></th>
<th>Small Network (1-5 Robots)</th>
<th>Medium Network (5-30 Robots)</th>
<th>Large Network (&gt; 30 Robots)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td>Late model Intel processor</td>
<td>Late model Intel processor</td>
<td>Late model Intel processor</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>512 Megabytes RAM</td>
<td>1 Gigabytes RAM</td>
<td>1 Gigabytes RAM</td>
</tr>
<tr>
<td><strong>Hard Disc</strong></td>
<td>20 Gigabytes available hard disk space</td>
<td>&gt; 20 Gigabytes available hard disk space</td>
<td>100 Gigabytes available hard disk space</td>
</tr>
<tr>
<td><strong>Tape backup system</strong></td>
<td>Recommended</td>
<td>Recommended</td>
<td>Recommended</td>
</tr>
<tr>
<td><strong>Disc backup system</strong></td>
<td></td>
<td></td>
<td>RAID 5 with SCSI hot-swappable disk drives and fast SCSI interface card.</td>
</tr>
<tr>
<td><strong>Uninterruptible power supply</strong></td>
<td>Recommended</td>
<td>Recommended</td>
<td>Recommended</td>
</tr>
<tr>
<td><strong>Operating system (either one)</strong></td>
<td>Windows XP Professional with Service Pack 2 (Recommended)</td>
<td>Windows 2003 Server with Service Pack 2 (Recommended)</td>
<td>Windows 2003 Server with Service Pack 2 (Recommended)</td>
</tr>
</tbody>
</table>
In addition, SVGA compatible display, Microsoft Compatible Mouse, Network interface card, CD-ROM drive is required.

**Data Collector Hardware and Software Requirements**

The data collector software requirements are listed below.

*Note: If the Data Collector is running on the same computer as the WebWare Server, the hardware and software requirements for the server pc is applied.*

<table>
<thead>
<tr>
<th>Any System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
</tr>
<tr>
<td>Memory</td>
</tr>
<tr>
<td>Hard Disc</td>
</tr>
<tr>
<td>Operating system</td>
</tr>
<tr>
<td>Web browser</td>
</tr>
<tr>
<td>Microsoft Message Queuing (MSMQ)</td>
</tr>
</tbody>
</table>

In addition, SVGA compatible display, Microsoft Compatible Mouse, Network interface card, CD-ROM drive is required.

**Controller Hardware and Software Requirements**

WebWare Server supports the following BaseWare versions

Verified against S4C+ 4.0.127
Verified against IRC5 5.11.01

For S4C+ the robot option FactoryWare Interface is required.
For IRC5 the robot option PC Interface is required.
Installation and Compatibility

In the following sections you will find the general installation procedure for Windows 2000 Professional, Server, and Advanced Server. To complete these installation procedures you must be logged in as an administrator.

This version of WebWare Server cannot be installed on computers with WebWare Server versions 3.0 or 3.2 installed.

Prior to installing WebWare Server, uninstall any older version of the product.

Configure WebWare Server Authentication

The instructions in this section apply to any medium or large WebWare Server installation that uses data collector computers that are separate from the WebWare Server network server.

Failure to properly configure the software components described below may result in poor system backup performance.

Configuration Procedure

Read the "Configure WebWare Server Authentication" and "Configure InterLink as a Recognized Domain User" sections in the WebWare Server Administrator’s Guide. The steps describe the process of configuring WWService.exe and InterLink.exe as recognized domain users on the WebWare Server network.

Less experienced users can find useful details in the appendix titled “Running InterLink as a Service”. The detailed procedures described there will apply to WWService.exe as well as to InterLink.exe.

Windows 2000 Professional and Windows XP Professional

WebWare Server comes with an installation program named setup.exe that installs the software on your hard drive. Follow the steps below to install the WebWare software.

1. If necessary, install the Internet Information Services (IIS) Management Console.
2. Start the installation by running the setup.exe on WebWare Server CD-ROM.
3. When prompted for the setup type during the installation, select "Complete". This option will configure IIS to host WebWare Server as a Virtual Directory under the "Default Web Site". This option will also configure Microsoft .NET for the newly installed virtual directory.
   Note: If not performing a "Complete" installation it is still recommended to configure IIS to host WebWare Server as a Virtual Directory due to the limitations of IIS in Windows 2000 Professional.
4. If "Custom" installation type was selected and you choose not to configure IIS to host WebWare as a Virtual Directory, continue with step 5. Otherwise skip to step 9.
5. Configure IIS to host WebWare Server as a Virtual Directory. By default the WebWare Server files are installed to C:\inetpub\wwwroot\WebWare.
7. In IIS configure execute privileges for WWBIN. This is a sub-directory under WebWare. The default execute privileges are "Scripts" this must be changed to "Scripts and Executables".

8. From the Windows Start Menu, under ABB Industrial IT > Robotics IT > WebWare Server. Run the .Net Installation utility to configure Microsoft .Net for the WebWare Server virtual directory.

9. Using the shortcut under Start > Programs > ABB Industrial IT > Robotics IT > Licensing > License Key Installation Wizard. Install the license key(s).


WebWare Server comes with an installation program named setup.exe that installs the software on your hard drive.

Follow the steps below to install the WebWare software.

1. If necessary, install the Internet Information Services (IIS) Management Console.

2. Start the installation by running the setup.exe on WebWare Server CD-ROM.

3. If you would like to configure IIS to host WebWare Server as a WebSite and not a Virtual Directory. When prompted to select the setup type select "Custom". Otherwise Select "Complete" to allow the installation to configure IIS automatically.

4. If "Custom" installation type was selected and you choose to configure IIS manually, continue with step 5. If "Complete" was selected skip to step 9.

5. Configure IIS to host WebWare Server as a Virtual Directory or a web site. Consult the IIS documentation for information on the differences. Note: By default the WebWare Server files are installed to C:\inetpub\wwwroot\WebWare.


7. In IIS configure execute privileges for WWBIN. This is a sub-folder under the WebWare folder found in IIS. The default execute privileges are Scripts this must be changed to Scripts and Executables.

8. From the Windows Start Menu, under ABB Industrial IT > Robotics IT > WebWare Server. Run the .Net Installation utility to configure Microsoft .Net for the WebWare Server virtual directory.

9. Using the shortcut under Start > Programs > ABB Industrial IT > Robotics IT > Licensing > License Key Installation Wizard. Install the license key(s).

10. The URL for the WebWare website will depend upon the configuration of IIS; if a "Complete" installation was used browse to http://localhost/Webware.
Important Upgrade Information (WebWare 3.x to 4.x)

Reports Upgrade Technique

WebWare Server upgrades require that you uninstall the old version of the software from the server computer before installing the new version. If you have created a number of reports, the uninstall process removes those files along with the rest of the old WebWare Server version.

There is a fairly painless way to preserve your reports so that you won’t have to recreate them after upgrading WebWare Server.

Before uninstalling the older WebWare Server version, copy your existing report configuration files to a safe location. You can then complete the required installation tasks and restore the report configuration to the correct location, so that they will be available after the newer version is installed.

Procedure

Follow the steps below to back up and restore your reports when upgrading WebWare Server.

1. Locate the reports folder. Normally, the folder will be located at C:\inetpub\wwwroot\WebWare\Data\Contents\Reports

2. Copy the reports folder to another location, away from the WebWare Server installation.

3. Uninstall the previous version of WebWare Server.

4. Install the new version of WebWare Server.

5. Copy the reports folder to C:\inetpub\wwwroot\WebWare\Data\Contents\Reports. Note: Overwrite the existing reports folder.

6. Open your browser to http://localhost/WebWare/update.aspx

7. On the page that appears, click the Update button.

8. When you run WebWare Server, your reports will appear in the Report Viewer page, the same as in the old web site.

Important Upgrade Information (General)

Upgrading between different WW4.x versions, and 3.x to 4.x, will affect the backup catalogue under C:\Program Files\Common Files\ABB Automation\WebWare Server\FileManager Data. Backups under this location will be removed during the new installation. Backup located on other discs will not be affected. To solve this follow the procedure below:

1. Locate the backup folder. Copy the directories under C:\Program Files\Common Files\ABB Automation\WebWare Server\FileManager Data to another location, away from the WebWare Server installation

2. Uninstall the previous version of WebWare Server.

3. Install the new version of WebWare Server.
4. Copy the backup folder to C:\Program Files\Common Files\ABB Automation\WebWare Server\File Manager Data  
   Note: Overwrite the existing backup folder if any exists

5. Open up the WebWare client and all the backups shall be available

**Robot Studio Online 5.10 incompatibility**

Robot Studio Online 5.10 use a license model incompatible with Webware.  
Do not install Webware Server or Webware SDK on a machine equipped with RSO 5.10 as the license will not be working and Webware will not work.  
This is solved with RSO 5.11.
What is New?

WebWare Server 4.9 is a maintenance release and it requires a new license key. Here follows a list of the functions that have been improved or added to the product.

**Solved problems**

**Internet Explorer**
- Webware Server has been verified with Internet Explorer 7 on english machine and prepared for Internet Explorer 8 compatibility.
- A full support cannot be guaranteed for these Internet Explorer versions and in case of problem return to Internet Explore 6.0 for full compatibility.

**New Service pack**
- Webware Server has been verified with Windows 2003 Server Sp2 and Windows XP Sp3.
- If problem of connections occurs with these new service pack, verify the security settings from the Service Pack chapter in the Administration Guide.

**WebWare Database Information**
- When it is not possible to read the size of the database (no access rights on remote disks), the field will .Size in MB will display “Not Available”.
- To resolve this provide correct right access to the webware server machine.

**IRC5 Polling Time**
- The polling time for IRC5 is defined automatically.
- It is possible to force a different value for testing. This could cause odd behavior on some robots like heavy cpu load and is not recommended.
- Contact ABB local technical support for more information.

**Backup possible with more than 400 files**
- When a backup was containing more than 400 files the backup was not successful in IRC5. This was due to the deletion of the previous backup who was containing too many files.
- The Delete directory method has been improved in IRC5 to support deleting more than 400 files.

**Backup Result Page improvement**
- The sorting on the Backup results page by Backup time was sometime incorrectly done. This is fixed now.
- It is possible to define the number of backup to display by page.
GetFileDev Information

- The method GetFileDevInformation who return size information was incorrect for some IRC5 robots this is fixed now.

Event in IRC5 are always displayed in English

- It is possible to get the event log from the robot in a different language than english by specific configuration
- Contact ABB local technical support for more information on how to enable it.

Trouble shooting Log

- A trouble shooting Log has been implemented on Robot connection issues.
- Contact ABB local technical support for more information on how to enable it.

Database error counter

- When database or schedule errors occurs, information are written in the Windows Event Log of the WWServer machine for support.
- An error counter of database error and the date of the last error is displayed in the Admin/Database page

Supported RobotWare versions

- The latest verified RW versions for S4 and IRC5 is displayed on the Home Page of WW Server.

Scheduled tasks on Remote SQL machine

- The scheduled tasks were not always working when SQL was installed on a Remote machine without specific security settings
- This is now working with the same credentials than the standard remote SQL settings

Configuration on Remote SQL machine

- The path to the sql database need to be defined as \machine\path in the admin page to be able to make it work on a sql server on a remote machine
- The webware user need also to be defined on the remote sql machine and on the WebWare machine with rights to read and write files under the \machine\path directory for archiving
- The WebWare Service need to be changed from running under local account to webware user account. When Scheduling a daily backup in WebWare Server it only works the first time the backup is initiated. Then it will fail.

Scheduled Backup machine

- When Scheduling a daily backup in WebWare Server it may works the first time the backup is initiated only. It is always working now.
Known Product Limitations

**Hidden files are not backed up**

When backing up a file system that has files with "hidden" attributes set; these files will not be included in the backup on the WebWare Server.

There are several instances where files that have the "hidden" attribute set are not backed up:

- Hidden files on a robot are not backed up when the robot alias is configured to backup via FTP.
- Hidden files in a File Device are not backed up since File Devices only use FTP for backup.
- Hidden files on a robot are not mirrored.

**DUMP directory caution**

Do NOT name a directory that you create on the controller DUMP!

When a WebWare backup is initiated at a robot, WebWare checks the controller to determine if a DUMP directory exists. If it does, the DUMP directory is deleted. WebWare then creates a new DUMP directory and copies the files in the backup set to that directory.

After the backup file set is completed, the backup set is transferred to the Data Collector. When that transfer is complete, the DUMP directory is deleted from the robot controller.

If you find a DUMP directory on your robot controller ramdisk, this is an indication that there might have been a problem with a recent backup. The problem may have been caused by a long file name. Check the file names on the robot, and shorten them to 8.3 format, or enable FTP in the robot's DCU profile. Refer to the product documentation for complete details.

Note that backups will fail until you remove the DUMP directory from the robot's ramdisk.

**Possible timeout error even when file transferred successfully**

It is possible to get a timeout error when uploading or downloading files large in size (greater than 20 megabytes) even though the file was transferred successfully.

**File upload/download limitation**

It is not recommended to upload or download files larger then 20 megabytes using the client interface of WebWare Server. Doing so may cause WebWare to use an excessive amount of the server computer's memory.

**Copy function of file system device is unreliable**

When copying files from WebWare Server (for example a backup in Visual SourceSafe) back to a File System Device (such as an FTP server), at times "something" will happen during the copy and InterLink will retry the operation. When a retry occurs, the FTP server sees this as another "user", and the process repeats itself until the hard limit of 10 users (Windows XP Professional and Windows 2000 Professional) is reached. At that point the connection will be broken to the File System Device.
A workaround is to copy files directly to a local drive instead of a File System Device.

**Connection state of file device is not detected correctly**
When a File Device (such as an FTP Server) is connected and the File Device (FTP Server) is shut down, the File Device will remain displayed as connected in the Device Tree at the WebWare Server web site and in InterLink Monitor.

**InterLink does not connect to WWSservice unless there is a database connection**
InterLink does not connect to WWSservice unless the database connection is up and running. A database error is displayed in the EventLog on the server, but no error is displayed at the Data Collector.
A workaround is to manually verify the connection state of the database.

**SIS Not supported for MultiMove Systems**
SIS does not support Multimove system.
SIS not supported for All IRC5 releases

**OPC Alarms and Events not Supported**
WebWare 4.9 does not support OPC Alarms and Events.

**Restore a VSS backup**
Files can get wrong datatype using VSS and prevent a restore/backup to be completed. Changing the datatype in VSS will allow the backup to be complete.

**Backup Module**
By default the robots must be in Auto mode with Program execution stopped for WebWare to be able to take backups.
If it isn't this will result in a Mode-check timeout failure and no backup will be taken.

**Report Module**
If you have a Pop-up blocker you should enter the WebWare Server site as one of the exceptions.
This since the Table Preview and Data Preview functions launches a pop-up window which will otherwise be blocked.

**Case Sensitive**
WebWare is case sensitive.

**Variable subscription**
Internet Explorer needs to be restarted if variables are removed from the DCU to be able to be updated.
S4Xdata

It is not possible to write an S4Xdata for an IRC5 system

Modem/IRC5

Interlink does not connect to an IRC5 robot via Modem line.

The security settings are not set if the firewall is 'off'

The security settings application which runs during installation requires that the firewall is on. If not, none of the settings are applied.

Silent mode/XPSP2

If the silent mode installation detects XP SP2, the installation will generate a question. The full silent mode is not supported any more.

RobotStudio 3.x, QuickTeach or ProgramMaker

In order to get RobotStudio, QuickTeach or ProgramMaker to run on the same computer as WebWare please follow the instructions below.

1. Log in with local administrator rights.
2. Close all applications except Windows.
3. Install RobotStudio, QuickTeach or ProgramMaker.
4. Install WebWare.

Please follow steps 5 and 6 to configure Interlink as an Out-Of-Process Server.

5. Start the “Command Prompt” (Start-Menu ➔ Run... ➔ write cmd ➔ press “OK”).
6. Enter the following text in the Command Prompt window:
   c:
cd\ncd program files
cd common files
cd abb automation
cd interlink
interlink –unregserver
interlink –regserver

7. Now you should be able to run WebWare and RobotStudio, QuickTeach or ProgramMaker on the same computer.

RobotStudio 5.x

If RobotStudio 5.x is installed prior to WebWare 4.9 it will set ASP.NET version to 2.0. This can be changed in Internet Information Services->WebWAre->Properties->ASP.NET.

Help files from older installation replaces newer.

If one first installs a product with SPL 2.1 and then installs a product with SPL 1.11 or SPL2.0, the help file from SPL 1.11 or SPL2.0 will overwrite the SPL 2.1 help file.
Uninstalling the last product leaves several SPL files

The SPL 2.1 is a shared component and will not uninstall until the last ABB licensed product is removed from the PC. Unfortunately there are several files that are left on the PC after uninstall in the C:\Program Files\Common Files\ABB Industrial IT\Robotics IT\Licensing directory.

Uninstallation of Products with SPL 1.11 removes files

The installer that was released with SPL 1.11 had critical shortcomings with regards to the XML files that are needed by both SPL 1.11 and SPL 2.1. The problem occurs when a customer with an SPL 1.11 product installs a newer product with SPL 2.1 and then uninstalls the older product. The SPL 1.11 uninstaller removes files needed by SPL 2.1. A customer experiences the problem when trying to run the Software Product Administrator (SPA) or trying to install new licenses. For the SPA the user will get the warning that the Short Cut is missing. For license installers, the user will get a dialog box with instructions on how to repair the installation. The installation can be automatically repaired by the user by going to Add & Remove Programs and choosing Repair on the newest ABB Robotics IT product that was installed.

LicenseKeyRequestWizard removed from Start Menu shortcuts

A PC with SPL1.11 and/or SPL2.0 and SPL2.1 products installed will have the LicenseKeyRequestWizard removed from the Start Menu shortcuts after uninstalling the SPL1.11 or the SPL2.0 product.

Shortcut in Start menu calls an old LKRW when installing 1.11 on 2.1

If an SPL 1.11 product is installed over an SPL 2.1 product the shortcut in the start menu will launch the License Key Request Wizard installed with the SPL1.11 product.

Isinit32 file disappears when uninstalling older version

The lsinit32 file will be removed from the license library if the customer uninstalls the last SPL2.0 product on the PC. This will cause problem if an SPL2.1 product is installed on the same PC. The problem will appear when requesting for a new license (the products will not appear in the available product list) and when open up the SPA (no products will be displayed). The installation can be automatically repaired by the user by going to Add & Remove Programs and choosing Repair on the newest ABB Robotics IT product that was installed.

Operating System

Win 9.x, WinME, Windows Server 2008 and Windows Vista are not supported for Webware installations.

Web browser

Internet Explorer 7.0 has been verified in english machine.

In case of problem return to Internet Explorer 6.0 for full compatibility.
Windows Terminal Server

Webware Server license and Windows 2003 Server Terminal Licenses can require a reboot of the Server machine.

If Webware Server service is restarted without restarting the server machine a license unit of the terminal license is consumed which cause the connection between the Data Collector and Webare Service to be lost, until the server machine is rebooted.

Backup on IRC5 can take a long time

The backup on IRC5 can use more resources and take more time than S4 robot.

It is then recommended to spread the backup on multiple data collector and to schedule the backup at different times to avoid a list of too many IRC5 robots to be backup in parallel.

IRC5 forward compatibility

Webware server has been verified with the last RobotWare available at the date of the release, and will stay compatible only with future RobotWare versions if no incompatibilities are introduced in the RobotWare Communication Runtime.

Some incompatibilities may be solved by installing on the data collector machine an Upgrade of the ABB Industrial Robot Communication Runtime from the utility folder of the RobotWare CD.

There no warranty that all the features will still be working on next RobotWare versions.

SIS information

The SIS was not working with some Robotware versions due to format change. This has been improved. The documentation also describe how to configure SIS for IRC5.

There is no warranty on compatibility and existence of SIS features for future RobotWare versions as the interface and data are changing.

Device Tree Node Limit

The device tree (Left Pane Tree) node limit is 2048 nodes.

If a very complex and huge number of robots exists it is recommended to use the Plant model feature to create a better hierarchy between devices.

Webware user name

The user name defined in Webware administration page are not case sensitive. Thomas is the same user name than thomas..

Edit Host File

If you cannot edit the host file in the Device Configuration Utility to use name instead of IP addresses, verify that you have the right to do it on your machine and it is not read only.
SQL 2005 / VSS 2005

Webware Server is not officially supported for SQL 2005 and Visual Source Safe 2005, and is not automatically preset for these applications. But as they have the same interface than SQL 2000 or Visual Source Safe 6.0d some customers experienced using it.

In case of problems contact Support for Help or Tech Notes without warranty.

Slow Startup of Webware Client

It happens on some machine that the first opening of the Webware Client Web page after having restarted the Server could take a long time, this could be linked to the order of the services starting on the machine and the virus scan.

Sometime refreshing the web Page or reopening a new one will accelerate the processus.

Too many rows in Line chart

It happens that when there is too many rows (above 400) in a line charts that the graphical will be mixed up.

The number of post to display should then be reduced by limiting the data or the period.

Robapi/FTP Client in IRC5

The number maximum of clients (Webware, RoboStudio Online, IRC5 OPC Server…) that can be connected to an IRC5 simultaneously is 3 for the Lan port and 1 on the Service port.

New error codes may be displayed in Interlink Monitor

IRC5CONFAIL_LIMITREACHED=23
IRC5CONFAIL_ALREADYLOGGEDON=24

The maximum number of FTP clients is 4.

IRC5 on different subnet

If the controller resides on a different subnet than the Data Collector, i.e. a remote controller it will not appear in a scan, a specific configuration is needed to connect to these robots.

Please contact your local ABB technical support for specific configuration.

Anonymous login in IIS

Do not disable anonymous access in IIS as this can affect the transfer of files to the robot from the web client, i.e. restore, file copy etc

S4CurrentPositionGet multimove

S4CurrentPositionGet is not supported for Multimove IRC5 robots to get the position of two robots at the same time.

In general Multimove specific features may not be supported by Webware SDK