

# CitectSCADA 7.0

## Release Notes for Service Pack 2

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### Important

*must*

**Incremental Compile**

(in Project Editor→Tools→Options)

### Important:

### Important:

**Table 1 - French and German Period field changes in Service Pack 2**

	No change.	<ol style="list-style-type: none"><li>1. Days of the week change from French to English.</li><li>2. Month names change from lower-case to title-case.</li><li>3. Day of the month format changes from BB BB</li></ol>
	Day of the month format changes from BB BB	<ol style="list-style-type: none"><li>1. Days of the week change from German to English.</li><li>2. Day of the month format changes from BB BB</li></ol>

**Known Issues:**

**Table 2 - Known Issues**

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- -  
- -  
- -

## Service Pack Installation

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### Upgrading CitectSCADA 7.0 to Service Pack 2

#### Existing CitectSCADA version 7.0 Users

patch file “ ”.

#### New CitectSCADA 7.0 Users

Run patch file “ ”.

### Upgrading CitectSCADA 7.0 Web Server to Service Pack 2

” patch file “

remove Programs) by choosing Start→Settings→Control Panel→Add or

Locate the entry 'CitectSCADA\_Cab\_Install' and click 'Remove'. If this item is not listed  
%windir%\system32\citect\webclient\700 NB: %windir%  
indicates the default windows installation directory.)

‘ ’ Client Control

### Upgrading CitectSCADA 7.0 IDC to Service Pack 2

patch file “ ”

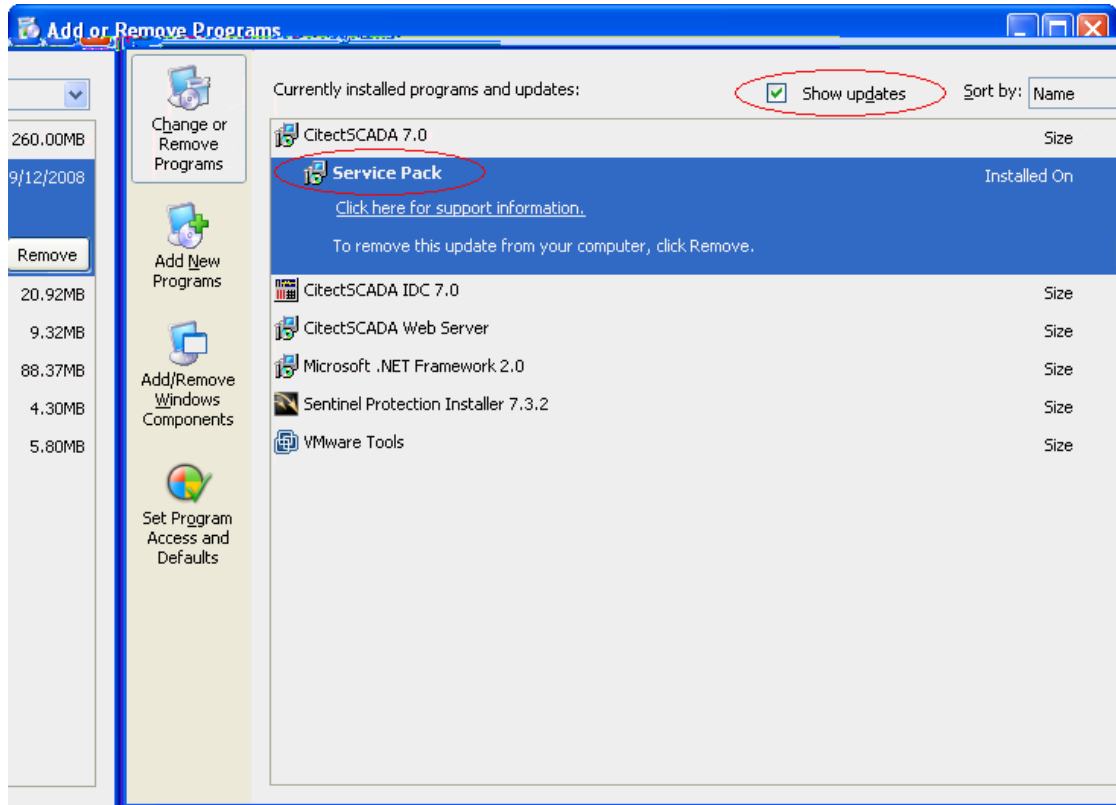
## Service Pack Uninstall

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### Microsoft Windows XP SP2 or Microsoft Windows Server 2003

Open ARP (Add or Remove Programs) by choosing Start→Settings→Control Panel→Add or Remove

the 'Show Updates' checkbox is ticked as follows:



**Figure 1: Service Pack visible as an update**

item and click 'Remove'.

removal is complete, highlight the parent product's entry (in this case 'CitectSCADA 7.0') and click the underlined link 'Click here for support information'. The following popup will

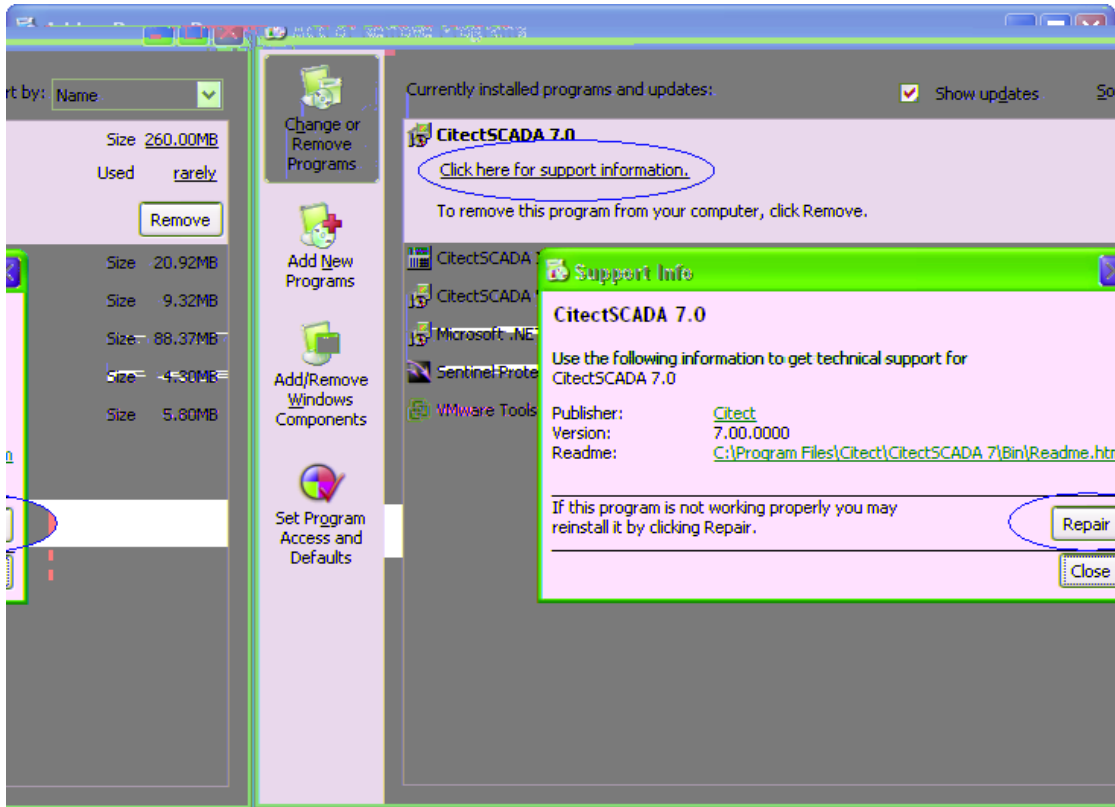


Figure 2: Support Info dialog in Windows XP SP2 and Windows 2003

Click 'Repair'.

**Microsoft Windows XP SP1 or earlier or Microsoft Windows 2000**

The 'Show Updates' feature of

Start → →"cmd" →

Table 3 - Service Pack 2 manual uninstall commands

Product	Uninstall Command

Open ARP (Add/Remove Programs) by choosing Start→Settings→Control Panel→Add/Remove Programs (or press F5 to refresh if already open).

Highlight the parent product's entry (in the list) and click the edit link 'Click here for support information'. The following popup will appear:

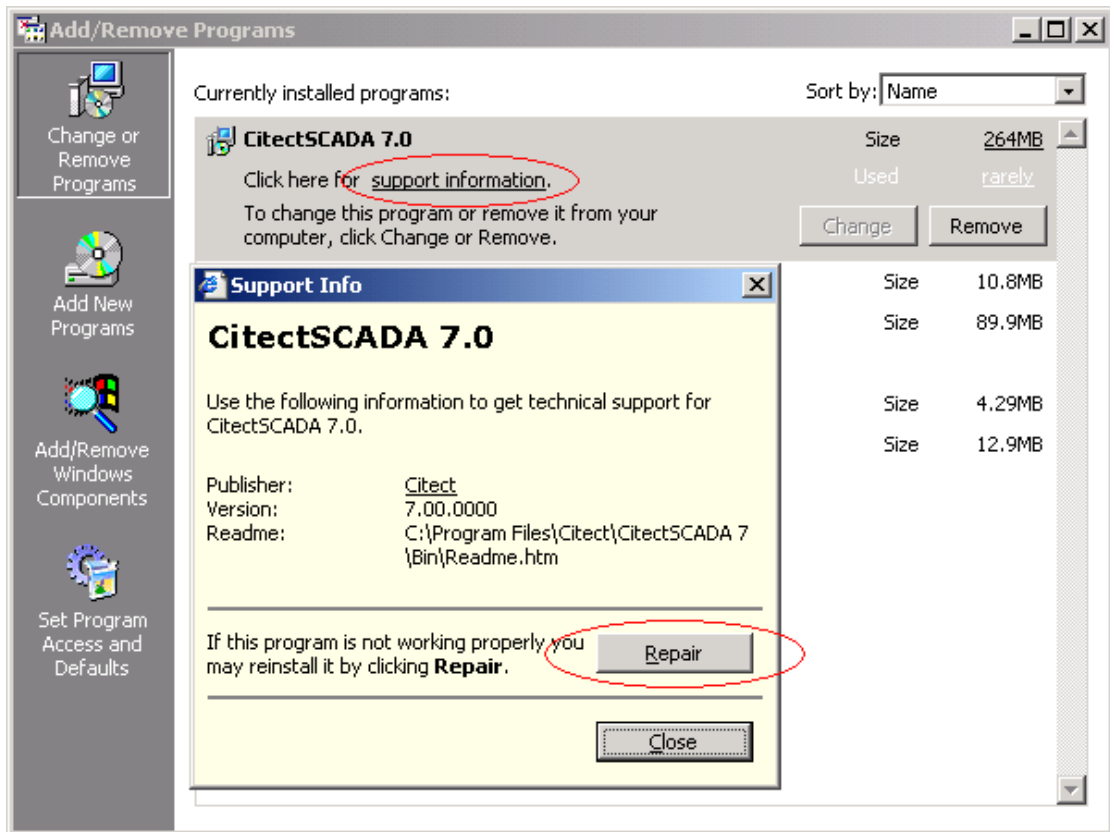


Figure 3: Support Info dialog in Windows XP SP1 and Windows 2000

Click 'Repair'.

## Updated Files – CitectSCADA - IDC

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### CitectSCADA IDC

_CommonFilesFolder_\Citect\Ct_ipc.dll	
_CommonFilesFolder_\Citect\CtApi.dll	
_CommonFilesFolder_\Citect\CtEng32.dll	
_CommonFilesFolder_\Citect\CtUtil32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Citect32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Client.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CSAPSI.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Ct_ipc.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtApi.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Ctcomdlg.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtEng32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Ctg32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtKC.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtRender.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtUtil32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtVersion.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtVersion.xml	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Dlg32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Rscite32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\RuntimeConfiguration.dll	
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Techdo32.dll	
Citect.Platform.DatasourceDevelopmentKit.BaseDatasource.dll	
Citect.Platform.Logging.TraceListeners.dll	
Citect.Platform.PSI.Interfaces.dll	
Citect.Platform.PSI.PSIClient.dll	
Citect.Platform.Net.Session.Tcpip.dll	
Citect.Platform.Net.SessionManager.dll	
_CommonFilesFolder_\Citect\Ctres32.dll	German install only
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Ctres32.dll	German install only
_CommonFilesFolder_\Citect\Ctres32.dll	French install only
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\Ctres32.dll	French install only
_CommonFilesFolder_\Citect\CtRes32.DLL	English install only
_ProgramFilesFolder_\Citect\CitectSCADA IDC 7.0\Bin\CtRes32.DLL	English install only



## Updated Files – CitectSCADA – SCADA

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### CitectSCADA SCADA

_CommonAppDataFolder_\Citect\CitectSCADA\Data\CSV_Example.ctz	
_CommonAppDataFolder_\Citect\CitectSCADA\Data\CSV_InstantTrend.ctz	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_AlarmConfig.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_AlarmConfig.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_AlarmFilterAdv.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_AlarmFilterAdv.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_AlarmInfo.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_AlarmInfo.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_MenuConfig.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_MenuConfig.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_MenuEdit.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_MenuEdit.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_RefreshingDataMessage.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_RefreshingDataMessage.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_Splash.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_Splash.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_TrendConfig.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_TrendConfig.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_TrendPopup.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\!CSV_TrendPopup.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\activex.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\activex.NDX	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\changes.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AdminTools.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AdminTools.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Alarm.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Alarm.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Alarms.ci	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AlarmDisabled.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AlarmDisabled.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AlarmHardware.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AlarmHardware.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AlarmSummary.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_AlarmSummary.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Analyst.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Analyst.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_File.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_File.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_MultiMonitors.ci	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Start.ctF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Start.ctg	

_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Trend.ctf	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_Trend.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_TrendDouble.ctf	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\CSV_TrendDouble.ctg	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\pages.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\pgbutton.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\pgkey.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\PGLANG.NDX	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\pgtouch.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\CSV_Include\xp_style.ctt	
_CommonAppDataFolder_\Citect\CitectSCADA\User\Include\citect.ci	
_CommonAppDataFolder_\Citect\CitectSCADA\User\Include\zoom.ci	
_CommonAppDataFolder_\Citect\CitectSCADA\User\System\HARDALM.DBF	
_CommonAppDataFolder_\Citect\CitectSCADA\User\System\HARDALM.txt	
_CommonFilesFolder_\Citect\CiMitsubishiTagBrowse.dll	
_CommonFilesFolder_\Citect\CiOPCDrv.dll	
_CommonFilesFolder_\Citect\CiTrendArchiveFileOffset.dll	
_CommonFilesFolder_\Citect\CiTrendArchiveFileOffset8Byte.dll	
_CommonFilesFolder_\Citect\CiTrendArchiveInterpolator.dll	
_CommonFilesFolder_\Citect\CiTrendManager.dll	
_CommonFilesFolder_\Citect\Ct_ipc.dll	
_CommonFilesFolder_\Citect\CtApi.dll	
_CommonFilesFolder_\Citect\CtEng32.dll	
_CommonFilesFolder_\Citect\CTODBC32.dll	
_CommonFilesFolder_\Citect\CtRes32.DLL	
_CommonFilesFolder_\Citect\CtUtil32.dll	
_CommonFilesFolder_\Citect\DatabaseExchange.ocx	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\AlarmServer.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Citect32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Citect32.exe.config	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Client.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CSAPSI.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Ct_ipc.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtApi.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtBack32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtCicode.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtCmp32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Ctcomdlg.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtDraw32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtEdit32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtEng32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtExplor.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtG32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtIndex.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtKC.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtMenu32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtProj.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtRender.dll	

_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtSetup.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtUtil32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtVersion.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\CtVersion.xml	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Diskdrv.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Dlg32.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\ERRSTR.DBF	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\ERRSTR.NDX	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\ExprWiz.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\FtpSvr.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\FUNC0.DBF	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\IOConnectors.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\IoServer.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\ReIndex.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\ReportServer.dll	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\Rscite32.exe	
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\RuntimeConfiguration.dll	

## Added Files – CitectSCADA – SCADA

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### CitectSCADA SCADA

_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\HELP.DBF	German install only
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\HELP.NDX	German install only
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\STREND.DBF	German install only
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\HELP.DBF	French install only
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\HELP.NDX	French install only
_ProgramFilesFolder_\Citect\CitectSCADA 7\Bin\STREND.DBF	French install only

## Added Files – CitectSCADA – Web Server

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### CitectSCADA WebServer

_ProgramFilesFolder_\Citect\CitectSCADA\WebServer\client\700\CitectSCADAWebClient_7_0_2_6.cab
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## Issues Resolved in this Service Pack

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*before*

	<p>A user triggers a popup via right clicking on one of the alarms from the section displaying the last 3 alarms on a CSV page and selecting the tag name. The popup opens correctly but displays the hardware alarm "Wrong Type For Text Display". This has now been resolved.</p>
	<p>When the project editor find and replace feature is used, any open graphic pages are closed even when nothing was replaced on the page. This issue has been resolved.</p>
	<p>When there are multiple page properties dialogs open, the information on the Event tab shows the settings from the most recently opened dialog on all dialogs.</p>

At startup the trend server was throttling the rate at which trend files are created according to [Trend]BytesWrittenBeforeSleep (intended to be a runtime only throttle), and this value was being capped at 32768 bytes. This has been fixed by introducing a new parameter [Trend]FileCreationWriteSize to control the rate at which trend files are initialised (whether created at startup or runtime). Its default value is 16384 bytes, with valid values being in the range 1 to 2147483647. Internal testing has shown optimal performance with values of 327680 bytes or lower. File writes larger than this appear to be batched in chunks of 65536 bytes, reducing the performance benefit. Environmental factors may alter this threshold.

StrToLines("AA BB CC",1,nLines) would return no lines when it should return six lines

To provide support for scrollbar removal and to disable scrolling, new modes are available in WinNewAt(). Global settings can be applied through citect.ini parameters.

New WinNewAt() Modes (argument 3):

- 16384 - Hide the horizontal scroll bar.
- 32768 - Hide the vertical scroll bar.
- 65536 - Disable horizontal scrolling.
- 131072 - Disable vertical scrolling.

	In Citect Explorer, dynamically importing OPC tags from an OPC Server fails. This has now been fixed.
	This problem can arise when calling WinFree in background Cicode such as during the page event "while page shown". The issue has been resolved.
	The implementation of the v7 UpdateStyle in the RedundantServer did not support alarm updates when SaveStyle=4. Thus the active server was sending updates but the redundant server was silently dropping them. This has now been fixed.
	If a super genie parameter has specific type, a type conversion operation is added by the compiler to the code so that pre v7 projects that have string values associated would work without change. Also the default value would be an empty string, when there is no association.
	If rectangle fill uses colour thresholds, a user intermittently would experience a crash in the display client. This has been corrected.
	A larger maximum length for library names is permitted
	Standby Writes on a single I/O Server were being redirected to the currently Active Unit rather than special casing for *local* Standby Writes. This has now been resolved.
	Due to differing IOserver and DISKDRV blocking algorithms, some IOserver calls lead to multiple Disk Command calls. If the address of a REAL tag happens to span two Disk Command blocks, then the REAL tag would fail validations checks. The checks are now performed using the IOserver blocks, instead.
	An unnecessary assumption in the code - that output devices were always single devices - would lead to a crash in the report server when a group was used as an output device.

	<p>In some cases when the system is shut down while there is a pending write or in rare cases asynchronous reads, then there will be a crash. This has been fixed.</p>
	<p>A logic error was introduced when refactoring the functions that handle alarm messages based on category. This problem has now been resolved.</p>
	<p>Each subscription callback event requires a new Cicode thread. Thus if multiple callbacks were triggered simultaneously, this would exhaust the pool of available threads, leading to an "Out of Cicode threads" error.</p> <p>This has been fixed by introducing a queueing mechanism to handle subscription callbacks in order to throttle the maximum number of callback threads that will execute simultaneously. This maximum is controllable by a Citect.ini parameter [Code]CallbackThreads with a range of 1 to 512 and a default of 5.</p>
	<p>Some systems will notice an extended delay (often 10 to 15 or more seconds) when switching from an active I/O server to a secondary I/O server when the SCADA system is shutdown cleanly. This was caused by the networking layer not being shutdown at an appropriate point in the shutdown sequence. This issue has now been fixed.</p>
	<p>The CBS_SORT style was added to the 'Startup Page' and 'Project Lists' dropdowns. This enhancement has been made.</p>
	<p>Writes to a tag on a StandbyWrite IO Device may have been issued to the wrong IO Device. The last IO Device entry, for the same channel, in the IODevice form would receive the write request. This issue has now been rectified.</p>
	<p>For French and German Citect installations, compile errors are produced when certain Period field options are selected from the drop down list in Project Editor forms. Such forms include Trend Tags and Events. This problem has now been resolved.</p>



	<p>Alarm synchronization between redundant alarm servers was being done in an inefficient manner, leading to high CPU usage when starting a second server. This has now been corrected.</p> <p>Difficulties in reproducing this issue have meant internal testing has not been able to verify this fix.</p>
	<p>User cicode functions that use window handles were not correctly handling shutdown situations, resulting in a crash at shutdown. This has now been fixed.</p> <p>Difficulties in reproducing this issue have meant internal testing has not been able to verify this fix.</p>
	<p>When switching between pages that include active alarms, the alarm text can sent to a page that is not the page that requested the alarm text. This results in the text being displayed on other graphical objects. This issue is now resolved.</p> <p>Difficulties in reproducing this issue have meant internal testing has not been able to verify this fix.</p>
	<p>A number of crashes have been fixed by correctly handling the communication of state changes to the redundant alarm server</p> <p>Difficulties in reproducing this issue have meant internal testing has not been able to verify this fix.</p>

**Originally resolved in Service Pack 1**



	<p>The CiCode function PageInfo(int) with argument 14 used in the web client can return incorrect values when either of the following two scenarios are satisfied:</p> <ol style="list-style-type: none"> <li>1. When launching the web client window and not yet having manually resized it.</li> <li>2. Manually resizing the base window so that scroll bars appear.</li> </ol> <p>This has been resolved.</p>
	<p>During start-up of a project with a space in its name, the alarm server stops responding, with the Runtime manager displaying the message "Initializing Alarm System".</p> <p>This has now been fixed.</p>
	<p>The AlarmComment CiCode function was broken in v7, resulting in comments not being saved.</p> <p>This has now been fixed.</p>
	<p>If the [CtEdit]Copy directory or any other needed Copy project directories are not available at start-up CitectSCADA will halt.</p> <p>This problem is now resolved.</p>
	<p>Hotkeys such as "Ctrl + G" (Goto object in Graphics Builder) do not operate correctly for German installations.</p> <p>This problem has now been resolved.</p>
	<p>IO devices being offline results in heavy network traffic between display client and IOserver.</p> <p>This issue has now been resolved.</p>
	<p style="text-align: right;">THIS CAN BE OVERRIDDEN</p>

	<p>For a German Citect installation, when editing "Favorite Colors" in Graphics Builder, the color picker is missing. This problem has now been resolved.</p>
	<p>CiCode function SleepMS() provided no protection for invalid, or negative, sleep periods. It was also possible, given precisely the right sleep time relative to the system clock, to cause a finite lock in the internal sleep mechanism. This could result in CiCode threads waking after their intended time. These problems have now been resolved.</p>
	<p>The array support for ctListRead tags was accidentally removed in v7 when the interface was re-written to fit the new IO model. This issue has now been resolved.</p>
	<p>When attempting to communicate with a PLC using an incorrectly configured tag a memory leak could result. This issue has been resolved.</p>
	<p>The function SubscriptionGetAttribute with the sAttribute parameter set to "Value" always retrieves the engineering value, regardless of what was specified in the sScaleMode parameter passed to TagSubscribe. This issue has been resolved.</p>
	<p>CitectSCADA was incorrectly truncating the log message for genies associated with an item in an array tag (e.g. tagA[2]) at the closing ']' character. This issue has been resolved.</p>
	<p>Restarting the alarm and IO servers results in analog and advanced alarms being retriggered. This issue has been resolved.</p>
	<p>The same tag defined with and without a cluster name will be counted twice in the point count. Now, when running in a single-cluster system, CitectSCADA ignores the cluster name when resolving tags, so that tags that are resolved with and without the cluster prefix will not be treated as two different tags, and thus will not be point counted twice.</p>
	<p>When a user views the CSV_AlarmSummary page only a maximum of 17 pages of alarm history is viewable when there should be more. This problem is now resolved.</p>

	<p>A large number of calls to CiCode function DspFont(), typically in the hundreds, can result in a Citect crash. This problem has now been resolved.</p>
	<p>Using MailSend() with attachments in v7 generates an MAPI error 12. This issue has been resolved.</p>
	<p>Alarm index file corruption was not detected at start-up, potentially leading to lost alarm save information. Now, CitectSCADA checks the index file at start-up, and will report the following error message if corruption is detected: "Failed to load the Alarm Save file. The file 'ALMINDEXSAVE.DAT' was corrupt or invalid. Citect could not be started."</p>
	<p>A change in the way string tags are handled in v7 caused a substantial memory leak when they are used in CiCode expressions (including page display). This issue has now been resolved.</p>
	<p>When the user sorts a list of alarms that spans across two pages via the AlarmSetInfo CiCode function, using the sort keys state and priority the sorting of the alarms is incorrect. This problem is now resolved.</p>
	<p>The 'Unity Fastlinx User Documentation.pdf' file supplied with the product is not readable. This file is located in the product BIN directory. The PDF file has been rebuilt and is now readable.</p>
	<p>On a Tag Subscribe a new subscription is created with a Tag Value Quality corresponding to the cached value from a previous subscription of the tag. Thus any client is initially given the stale cache value with Quality set to Good. This has now been fixed.</p>
	<p>Compiler support for the remapping functionality that the Bailey driver relies on was inadvertently removed from the CitectSCADA compiler. This functionality has now been restored.</p>
	<p>If a super genie parameter has specific type, a type conversion operation is added by the compiler to the code so that pre v7 projects that have string values associated would work without change. Also the default value would be an empty string, when there is no association.</p>

	<p>Networks where there is high packet-loss or high latency may experience an issue where server processes suffer unusually high CPU in the Tran.Task.Delay task. This is because connection attempts are timing out and not being correctly cleaned up. This issue has now been fixed.</p>
	<p>The MsgBrdcst function was not updated to support clustering in v7. This function has now been modified to accept an optional 4th parameter for cluster name. If no cluster is specified, MsgBrdcst will lookup the currently active cluster as per the logic for MsgOpen.</p>
	<p>When the user sorts a list of alarms using the AlarmSetInfo CiCode function, using the sort key state the sorting of the alarms are incorrect. This problem is now resolved.</p>
	<p>When the user configures the AlarmSetInfo CiCode function to filter by category the incorrect alarms are displayed. This problem is now resolved.</p>
	<p>If you attempt to write a value to an array tag that is failed by a driver, the value you attempted to write is display as the tag value on the page until you navigate off and back to that page. The expected behaviour is that the value on the page should revert to the correct value after the I/O server is notified of that the write failed. This issue has been resolved.</p>
	<p>When the user invokes the AlarmSumDelete CiCode function to delete an alarm from an alarm summary page it is not removed as expected. This problem is now resolved.</p>
	<p>Using TimeToStr() to retrieve the date returned incorrect English values due to missing localisation elements for German locale. This issue has been resolved.</p>
Also resolves	<p>Calling CiCode function WinNewAt() with no cluster specified and mode 128 "Open a unique further windows of that type to be opened. This problem has now been resolved.</p>

	<p>Local variable Tag Quality is never set to Good. This affects the display of all tag on a page with a local variable Tag. This has now been fixed.</p>
	<p>An intentionally malformed packet can cause a buffer overrun when directed at B Users are reminded to run Citect as intended on a secure isolated network.</p>
	<p>The Alarm Server in the past required access to master.dbf, a file residing only on the compile-time machine and not copied with [CtEdit]Copy/Run. This dependency has now been removed and the problem resolved.</p>
	<p>When a pop-up page is opened for the first time, it fails to set whether it should be a Child of the Parent Window or not. For example using either the WinNewAt() or AssWin() CiCode functions with their Mode Parameters set to 1 (Page Child Window), a second call was not closing the first Window. This has now been corrected.</p>
	<p>A number of CiCode functions, including AssChainWin(), create and use a pending Genie association with the next Window opened. If the window limit is reached this association is never completed and is erroneously used with the next successful window open. This issue has been resolved.</p>
	<p>The Quality of tags on IODevices which are running in Memory mode are never set to Good. This affects the display of all tags on any page with a tag from a memory IODevice. This has now been fixed.</p>
	<p>Variables read by CiCode functions start as zero. Once read they retain the last value. If the IO device goes off line, they see the last value. A change of behaviour introduced in v7 meant that when Tag quality changed from Good to Bad it's value was cleared. This has been corrected to behave as earlier versions do.</p>
	<p>Under certain circumstances, usually involving a unit or units being offline, the IOserver reclaims a DCB that is being held by a driver. At some later point in time, the driver goes to process this DCB, which is no longer valid, and results in a crash. This has been fixed.</p>
	<p>Correctly configured projects, typically employing the Add Project Link feature or [CtEdit]Copy/Run, could receive this error at start-up due to a fault in path reconstruction logic. This problem has now been resolved.</p>





	<p>Tags on IO devices with background polling enabled are not going to #COM on the display clients graphics page when the device is disabled using the IODeviceControl CiCode function. This issue has been resolved</p>
	<p>The socket data read from the Citect FTP server is better validated to protect against intentional misuse, such as sending malformed data in format string or buffer overflow attacks. In addition, the credentials used by the IDC are no longer stored in the module or loaded image. The credentials have not changed but are constructed and freed as needed to decrease their visibility.</p>
	<p>The default value of the [Kernel]ErrorBuffers parameter has been increased from 200 to 1000. Traces are sent to the syslog.dat file by a background task and when the pending messages to print exceed the buffer count, the messages are lost.</p>
	<p>ctTagWrite() does not wait for the write to complete but always returns immediately with TRUE. This has now been fixed. Large numbers of consecutive writes will incur a performance degradation. To work-around this, users may use the asynchronous version of this function (ctTagWriteEx with a valid CTOVERLAPPED structure).</p>
	<p>An error in the initialisation of standby devices at IOServer start-up results in slow page updates when retrieving data from standby devices. This issue has now been fixed.</p>
	<p>Subscriptions automatically created for pages, as well as manually created by calling the TagSubscribe cicode function, were not honouring the [Code]WriteLocal parameter. Instead they were being forced to update the local cache on any write.</p>