# VijeoCitect 7.10

# **Release Notes for Service Pack 3**

The V7.10 Service Pack 3 includes several product updates and enhancements, providing improvements in stability, performance and functionality.

# Important:

As per recommended practice, all projects should be backed up prior to commencing the Service Pack installation.

# Important:

All projects be upgraded and recompiled after installing this Service Pack. Failure to do so will result in conflicting database size messages. To force an upgrade, edit the Citect.ini file and set [CTEDIT] UPGRADE=1. Ensure tha()-9(a)4(n)42E=1.

### **Hot Fixes**

Customers who have hot fixes installed should check the release notes to ensure the applicable fix is included in V7.10 Service Pack 3 - please contact SCADA Global Support if in any doubt.

SCADA Global Support recommends V7.10 users apply the Service Pack as soon as practically possible.

This Service Pack accumulates all of the updates included in V7.10 Service Packs 1 and 2, so it is not necessary to install the older Service Packs first.

# Note:

For general information about service packs, see Knowledge Base article Q2181.

This service pack applies to two of the products shipped with VijeoCitect version 7.10:

- a) VijeoCitect
- b) VijeoCitect Web Server

Separate service pack installers have been created for each of these products, allowing you to choose which products you wish to upgrade to Service Pack 3, depending on your requirements.

### **Known Issues:**

This Service Pack contains the known issues described below.

43725	"Incorrect arguments" compile error after uninstalling service pack
	After uninstalling service pack 3 (back to the release version) all projects that use the CSV_Include project (including the CSV_Example and Facilities projects) give a compile error indicating "incorrect arguments".
	Customers experiencing this issue should do an <b>Update Pages</b> (in Graphics Builder→Tools→Update Pages) on any affected projects.
42749	WebServer Service Pack cannot be independently uninstalled on Windows Vista and Windows 7
	On Microsoft Vista and Windows 7, the Web Server Service Pack cannot be uninstalled independently from the base application. Instead the VijeoCitect Web Server must be uninstalled to remove both the base product and Service Pack, and then the base product may be reinstalled. This has been documented in Knowledge Base article Q5450.

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# **Service Pack Installation**

## Upgrading VijeoCitect 7.10 to Service Pack 3

The procedure for installing Service Pack 3 for VijeoCitect depends on whether you are an existing user of VijeoCitect version 7.10 or a new user.

### Existing VijeoCitect version 7.10 Users

- 1. Run patch file "VijeoCitect SCADA 7.10 Service Pack 3.exe".
- 2. Open Citect Explorer, wait until upgrade has completed.
- 3. For any project using CSV\_Include templates:
  - a. Select the project in Citect Explorer.
  - In Citect Graphics Builder, select Tools→Update Pages, then click Yes to continue.
- 4. Ensure the Incremental Compile menu option (in Project Editor→Tools→Options) is turned OFF then recompile each project.
- 5. For any webclient project whose graphics pages were updated in step 3, redeploy:
  - a. Run Citect Explorer→Tools→Web Deployment Preparation.
  - b. Follow the steps below for "Upgrading VijeoCitect 7.10 Web Server to Service Pack 3" and resave the project deployment.

### New VijeoCitect 7.10 Users

- 1. Install VijeoCitect 7.10.
- Open Citect Explorer for the first time and then close.
- 3. Run patch file "VijeoCitect SCADA 7.10 Service Pack 3.exe".
- Open Citect Explorer, wait until the upgrade has completed.
- 5. For any project using CSV\_Include templates:
  - Select the project in Citect Explorer.
  - b. In Citect Graphics Builder, select Tools→Update Pages, then click Yes to continue.
- 6. Ensure the Incremental Compile menu option (in Project Editor→Tools→Options) is turned OFF then recompile each project.

### Upgrading VijeoCitect 7.10 Web Server to Service Pack 3

Installing Service Pack 3 for VijeoCitect Web Server requires that you install Service Pack 3 for VijeoCitect as well otherwise the web client will not work correctly. You should perform this installation as per one of the above two scenarios, then:

- On your web server(s) (machines running IIS), run patch file "VijeoCitect WebServer 7.10 Service Pack 3.exe". This will install an updated CAB file: CitectSCADAWebClient\_7\_10\_3\_70.cab, which will become available to all your web clients.
- 2. On all your web client machines, take the following actions:
  - a. Open ARP (Add or Remove Programs) by choosing Start→Settings→Control Panel→Add or Remove Programs.
  - Locate the entry 'Citect Web Client 7.10' and click 'Remove'. If this item is not listed in ARP, you should delete the directory. (
  - c. In the VijeoCitect Web Deployment Configuration (in Internet Explorer):
    - i. Select 'CitectSCADAWebClient\_7\_10\_3\_70.cab' from the drop down menu.
    - ii. Save the deployment by selecting the action to save deployment.

# **Service Pack Uninstall**

The procedure for removing (rolling back) Service Pack 3 depends on which Operating System you are running.

#### **All Windows Versions**

Before following one of the procedures below, backup your citect.ini file to a temporary location. You can use the Computer Setup Editor (via Tools menu) to determine the location of this file. This step is required as the uninstall procedure may revert some settings back to their default. Additionally, unless you are restoring your projects to the backups made prior to Service Pack upgrade, you will also need to backup the citect.frm file from the Bin directory. Restore the citect.ini file (and possibly citect.frm) to their original location upon completion of the uninstall procedure.

During the uninstallation process the user will be prompted to specify the VijeoCitect 7.10 installer location if it is no longer accessible. The following message is shown if VijeoCitect 7.10 has been installed from a DVD: "The feature you are trying to use is on a CD-ROM or other removable disk that is not available". Hence when uninstalling SCADA service pack 3 the user will have to specify the VijeoCitect 7.10 installer location. Locate the MSI installer for the VijeoCitect 7.10 product via the Browse button, then click OK. The SCADA installer is located in the "Citect" folder under the main installation directory (e.g. your DVD drive).

#### Microsoft Windows Vista and Windows 7

#### Note:

On Microsoft Vista and Windows 7, the Web Server Service Pack cannot be uninstalled independently from the base application. Instead the Citect Web Server must be uninstalled to remove both the base product and Service Pack, and then the base product may be reinstalled. This has been documented in Knowledge Base article Q5450.

Follow these steps to uninstall products other than the Web Server:

From the bin directory of your Citect installation, run patch file "VijeoCitect SCADA 7.10 Uninstallation Patch.exe".

further information, see Knowledge Base article Q5444.

2. Open "Programs and Features" by typing its name in the Start Search bar then selecting it from the list:

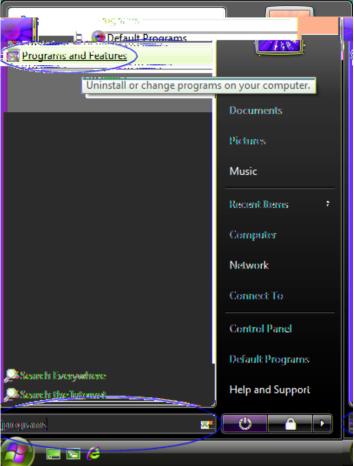


Figure 1: Programs and Features on Vista

3. Select "View installed updates" from the side panel that is presented:

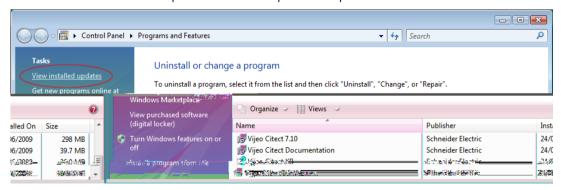


Figure 2: View installed updates on Vista

4. Select "Service Pack 3" for the appropriate product then click Uninstall:

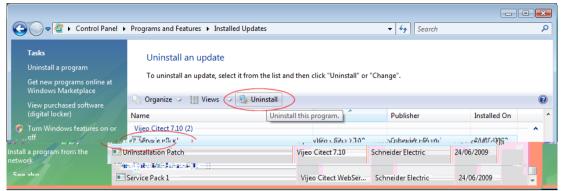


Figure 3: Uninstall an update on Vista

#### Note:

If you have User Access Control switched on in Windows Vista, the orange UAC dialog will be displayed before the uninstaller is launched. Select allow and proceed with the uninstallation. This is a limitation imposed by the User Access Control and cannot be avoided.

- 5. Once the removal is complete, return to the Uninstall or change a program page via the "Uninstall a program" link on the side panel.
- 6. Select the parent product's entry (in this case 'VijeoCitect 7.10') and click Repair:

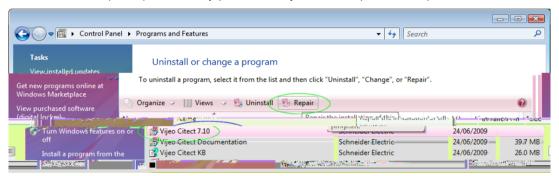


Figure 4: Repair on Vista

#### Note:

As in step 4, if User Access Control is on the orange UAC dialog will be displayed before the repair is launched. Select allow and proceed with the repair.

- 7. Open Citect Explorer, wait until upgrade has completed.
- 8. For any project using CSV\_Include templates:
  - a. Select the project in Citect Explorer.
  - b. In Citect Graphics Builder, select Tools→Update Pages, then click Yes to continue.
- Ensure the Incremental Compile menu option (in Project Editor→Tools→Options) is turned OFF then
  recompile each project.

### Microsoft Windows XP SP2 or Server 2003

Follow these steps to uninstall:

From the bin directory of your Citect installation, run patch file "VijeoCitect SCADA 7.10 Uninstallation Patch.exe".

further information, see Knowledge Base article Q5444.

 Open ARP (Add or Remove Programs) by choosing Start→Settings→Control Panel→Add or Remove Programs. 3. Make sure the 'Show Updates' checkbox is ticked as follows:

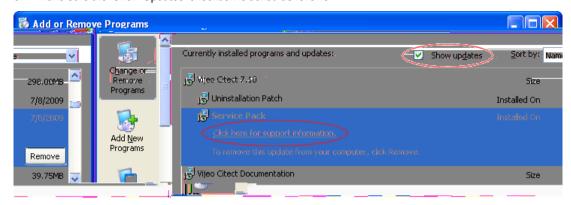


Figure 5: Service Pack 3 visible as an update

- 4. You should see the service pack listed as a sub-entry under the parent product.
- 5. Select this sub-item and click 'Remove'.
- 6. Once the removal is complete, highlight the parent product's entry (in this case 'VijeoCitect 7.10') and click the underlined link 'Click here for support information'. The following popup will appear:

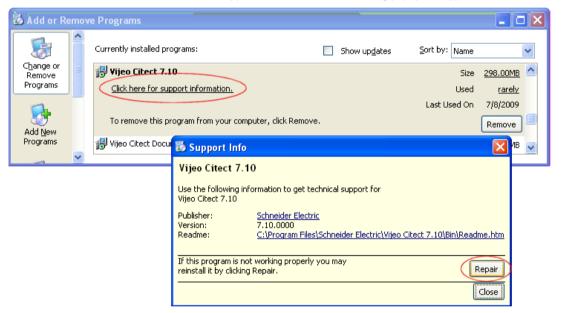


Figure 6: Support Info dialog in Windows XP SP2 and Windows 2003

- 7. Click 'Repair'.
- 8. Open Citect Explorer, wait until upgrade has completed.
- 9. For any project using CSV\_Include templates:
  - a. Select the project in Citect Explorer.
  - b. In Citect Graphics Builder, select Tools→Update Pages, then click Yes to continue.
- Ensure the Incremental Compile menu option (in Project Editor→Tools→Options) is turned OFF then recompile each project.

## Microsoft Windows XP SP1 or earlier or Microsoft Windows 2000

The 'Show Updates' feature of ARP (as shown in Figure 1) is not available under these operating systems, so an uninstall of the service pack must be performed manually as follows:

From the bin directory of your Citect installation, run patch file "VijeoCitect SCADA 7.10 Uninstallation Patch.exe".

further information, see Knowledge Base article Q5444.

2. Open a command prompt e.g.  $Start \rightarrow Run \rightarrow "cmd" \rightarrow [enter]$ .

Table 1: Service Pack 3 manual uninstall commands

Product	Uninstall Command
VijeoCitect SCADA 7.10 Service Pack 3	msiexec /uninstall {C0FBF874-55D2-438F-910E- BAB9FB90BABE} /package {3582EEF6-782C-4884-9278- E54D015B1AD3} /qb
VijeoCitect WebServer 7.10 Service Pack 3	msiexec /uninstall {2BE021B5-5901-4A42-AB79-09713EBEF609} /package {B7A02776-729C-4594-AF91-EF18F349E3BE} /qb

- b. Open ARP (Add/Remove Programs) by choosing Start→Settings→Control Panel→Add/Remove Programs (or press F5 to refresh if already open).
- c. You should now see the product name has returned to the original pre-service pack name.
- d. Highlight the parent product's entry (in Figure 3, this is 'VijeoCitect 7.10') and click the underlined link 'Click here for support information'. The following popup will appear:

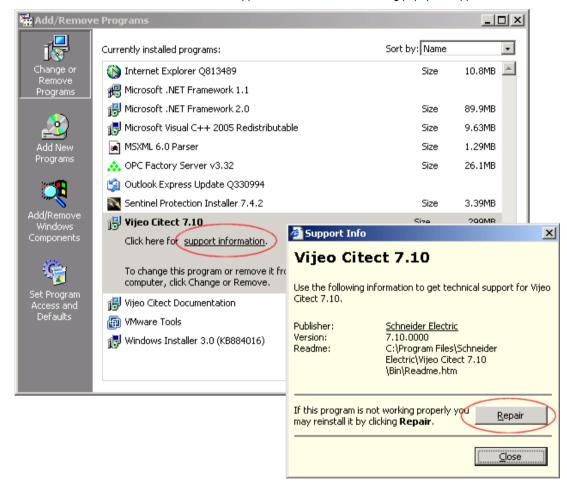


Figure 7: Support Info dialog in Windows XP SP1 and Windows 2000

- e. Click 'Repair'.
- 4. Open Citect Explorer, wait until upgrade has completed.
- 5. For any project using CSV\_Include templates:
  - Select the project in Citect Explorer.
  - b. In Citect Graphics Builder, select Tools→Update Pages, then click Yes to continue.
- 6. Ensure the Incremental Compile menu option (in Project Editor→Tools→Options) is turned OFF then recompile each project.

# Updated Files - VijeoCitect - SCADA

Listed below are the files that will be updated in the **VijeoCitect** product after installing 7.10 Service Pack 3.

Install Path and File updated	Notes
_CommonFilesFolder_\Citect\MsgBox.ocx	
_CommonFilesFolder_\Citect\ciTextBox.ocx	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\AlarmServer.dll	
_CommonFilesFolder_\Citect\Analyst.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtRender.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtRegion.dll	
_CommonFilesFolder_\Citect\CiOPCDrv.dll	English
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\Citect32.exe	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\Config\Citect32.exe.config	
_CommonFilesFolder_\Citect\CiTrans.dll	
_CommonFilesFolder_\Citect\CiTrendArchiveFileOffset.dll	
_CommonFilesFolder_\Citect\CiTrendArchiveFileOffset8Byte.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\Client.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtSetup.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\ComputerSetupEditor.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CSAPSI.dll	
_CommonFilesFolder_\Citect\Ct_ipc.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\Ct_ipc.dll	
_CommonFilesFolder_\Citect\CtApi.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtApi.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtBack32.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtCicode.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtCmp32.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtDraw32.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtEdit32.exe	
_CommonFilesFolder_\Citect\CtEng32.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtEng32.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtExplor.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtOpc32.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CTOPC32.exe	

D	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtProj.dll	
_CommonFilesFolder_\Citect\CtRes32.DLL	English
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtRes32.DLL	English
_CommonFilesFolder_\Citect\CtRes32.dll	German
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtRes32.dll	German
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtUtil.dll	
_CommonFilesFolder_\Citect\CtUtil32.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtUtil32.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtVersion.dll	
_CommonFilesFolder_\Citect\DatabaseExchange.ocx	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\Diskdrv.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\ExprWiz.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\IOConnectors.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\loServer.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\PolledDataSource.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\ReportServer.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\RuntimeConfiguration.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\RuntimeManager.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\TrendServer.dll	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\Include\tag.ci	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CTTAGDB.dll	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\Include\graph.ci	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\TimeSyncConfig.exe	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\TagGen.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\Citect.CitectSCADA.TagGen.dll	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	Chinese
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	English
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	German
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	Spanish
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	French
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	Japanese
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	Korean
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	Italian
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\citect.frm	Russian

_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_MultiMonitors.ci	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\Include\zoom.ci	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\Include\info.ci	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\Include\CTUTIL.CI	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Navigation.ci	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Alarms.ci	
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\CtVersion.xml	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\Include\LABELS.DBF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\changes.DBF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AdminTools.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AdminTools.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Alarm.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Alarm.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AlarmDisabled.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AlarmDisabled.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AlarmHardware.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AlarmHardware.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\csv_alarms.ctm	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AlarmSummary.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_AlarmSummary.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Analyst.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Analyst.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_File.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_File.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_ListBox.ci	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Start.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Start.ctg	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Trend.ctF	
_CommonAppDataFolder_\Schneider Electric\Vijeo Citect 7.10\User\CSV_Include\CSV_Trend.ctg	

\_CommonAppDataFolder\_\Schneider Electric\Vijeo Citect 7.10\User\CSV\_Include\CSV\_TrendDouble.ctF

\_CommonAppDataFolder\_

Citect.Platform.PSI.ConnectorLoader.dll

Citect.Platform.PSI.ClusterManager.dll

# Added Files - VijeoCitect - SCADA

Install Path and File added	Notes
_ProgramFilesFolder_\Schneider Electric\Vijeo Citect 7.10\Bin\VijeoCitect SCADA 7.10 Uninstallation	
Patch.exe	

# Added Files - VijeoCitect - Web Server

Listed below are the files that will be added to the  $\mbox{\sc VijeoCitect}$  Pack 3.

product after installing 7.10 Service

Install Path and File added	Notes
Citect\client\710\CitectSCADAWebClient_7_10_3_70.cab	

# **Issues Resolved in this Service Pack**

This Service Pack resolves the issues described below. If you have any hotfixes installed on your current version, please check if they are included in this service pack. If the hotfix is not included in the list below, or you have any concerns regarding the issues covered, please contact Support installing this Service Pack.

Issue Number	Issue Title and Description
32692	Manipulating alarms while using [Alarm]DisplayDisable=1 produces unexpected results.
	When using [Alarm]DisplayDisable=1 the following unexpected behaviour can be observed All other alarms besides the "Time Stamped Digital" and "Time Stamped Analog" alarms cause an extra alarm summary event if an alarm is disabled and then re-enabled Disabling and triggering a "Time Stamped", "Time Stamped Digital" or "Time Stamped Analog" alarm causes the alarms to "disappear"; meaning that the alarm neither exists on the alarm page or the disabled alarm page. A further untriggering of the alarms then makes the "Time Stamped" alarm re-appear. This has now been resolved.
36222	IDC displays CSV_Start page at startup instead of the user created startup page
	When a user page is created with the name startup, it should be the first page displayed at startup. However, in the Internet display client, the CSV_Start page was being displayed instead for projects including the CSV_Include project. This problem has now been fixed.
36402	[Win]AltEsc and [Win]AltTab parameters do not work
	Setting the [Win]AltEsc and [Win]AltTab citect.ini parameters to 0 to disable the respective hotkey combinations does not make any difference. The end user will still be able to execute these hotkeys. This problem has been resolved.
36511	[debug]syslogsize range issues and size increase
	The syslogsize parameter to control the size of the syslog.dat file has now been range checked to ensure valid entries. Previously a value above 32767 could cause invalid handling. The maximum allowable value has been increased to 2000000. This representing a 2G sized file.
36794	The compiler does not detect incomplete tokens in device format strings
	The format of a format template string ————————————————————————————————————

	',' between the width and justification. 2. Bracer malformation. This is when there is an open bracer '{' but no closing bracer '}'. In this case the malformation is printed as a string literal. For example: Take the following string: < { LocalTimeDate , 20 , R } > TagLabel < { Tag , 20 , L > DescriptionLabel < { Desc , 20 , L } > The output would be as follows: < 2009-07-17 11:31:44 > TagLabel < { Tag , 20 , L > DescriptionLabel < ValidAlarm1Desc > Notice that the "Tag" name value is outputted as a literal as no closing bracer '}' is detected.
37767	Alarm tag property tag.disabled always returning 0 when [alarm]displaydisable=1
	When [alarm]displaydisable=0 is set and an alarm is disabled, that alarm tag property, "tag.disabled", returns 1 When [alarm]displaydisable=1 is set and an alarm is disabled, that alarm tag property, "tag.disabled", returns 0 The fix for Bug 37767 means that when [alarm]displaydisable=1 is set and an alarm is disabled, that alarm tag property, "tag.disabled", returns 1
37821	Floating point tag displays 1.#R error and does not change back to normal
	Some drivers may legitimately return floating point NaN, in which case Citect displays 1.#R Any REAL value that starts as NaN will not update to any other, any other REAL value will not update to NaN.
40370	Using Run/Copy with a nonexistent path results in error message
	When using Run/Copy, if a project folder doesn't exist on the target machine, Run/Copy reports "Cannot locate included project 'Full Path', please ensure this path is available". This has now been fixed, and the folder is automatically created if it does not exist.
40925	TagSubscribe() callback function being called continously when the tag value is out of range of Variable tag Raw zero or Raw Full scale value
	It appears that TagSubscribe() callback function is being called continously when the tag value is out of range of Variable tag Raw zero or Raw Full scale value. This situation can occur only with a system where the Raw tag value are not set to match with the raw data coming in from the IO device. Fix Details ======= When the subscribed value is to be updated, the raw value of the quality is compared rather than the quality after the engineering ranges have been evaluated and the quality updated (e.g. quality.LimitStatus)
42122	Import Tags causes exception in CTEDIT32.exe
	Changes to the variable database format in version V7.10 caused a buffer overrun during tag import. This has been resolved by increasing the buffer available to import tags.
42163	Using Taginfo to test existence of tags before call super genies doesn't work for alarm properties
	CiCode function Taginfo has been extended to include Alarm properties, this applies only to the "name" query (nType value of 0)
42453	Some keyboard shortcut keys do not trigger
	The following keyboard shortcuts do not trigger as expected Keyboard shortcuts that contain a space

	reference happened to reference a variable of the correct type, a report might change to value of variables of other reports.
42842	BITAND not working correctly when used in Symbol Set and other graphic item features
	When using the BITAND operation in the 'ON symbol when' property of a Symbol Set, it only seems to work correctly for the first 16-bits. Anything higher and it results in 0 at all times. For example, if you use the decimal number 1895071744 (0111 0000 1111 0100 1000 0000 0000 0
42853	Compiler crashes in "incremental compile" mode when variable name contains spaces
	An incremental compile of a project which contains variable names with spaces (e.g. MyOPC Test!Tag1) results in a crash. This issue has been resolved.
42858	The TrnPlot() cicode function fails when passed an Animation Handle of zero.
	The TrnPlot() cicode function calls initialisation code that fails when passed an Animation Handle of zero. The failure however is not immediately noticed, and fails later on (when checked). This has now been fixed. When called with an Animation handle of zero, it now uses the properties of the first Pen (Pen zero).
43013	Cicode doesn't break when debugging with Single machine, Multi-Cluster setup.
	When testing, it is not unusual for a single computer system to be setup to run multiple Clusters. However, only one instance of the Cicode Debugger can be active on a single system. Worse still, the [Debug]CodeDebug CITECT.INI parameter did not allow one to specify exactly which Cluster you wanted to have the Debugger attach to. This has now been fixed. You can now use a dotted Cluster name and Component syntax when using [Debug]CodeDebug. For example, "MyCluster1.Alarm" to Debug the Alarm component of the Cluster named "MyCluster1". You can now also see messages in each Component"s Kernel Window related to whether the Cicode Debugger can attach or not. Specifically: "Cicode Debugger disabled in this process." and "Debugger is listening."
43048	Using timestamped digital/analog alarms with long tag names results in crash
	Insufficient space was allocated internally for storing the tag name for the "Variable tag" fields of timestamped digital and analog alarm records. This has now been fixed.
43095	CSV_MessageBox() fixes for timeout, duplicates and cancel mode
	Fixes and improvements have been made to the CSV MessageBox handling and control. Timeouts now work and return a new error code. Cancellation of a box has been improved. Invoking duplicate boxes has been fixed and now returns its own cicode error code. Users are advised to read the header of the cicode function CSV_MessageBox() in CSV_MessageBox.ci in the CSV_Include project directory, for full details.
43289	The custom decimal separator setting [Intl]sDecimal in Citect.ini is not working properly
	An attempt to override the regional decimal separator character with the [Intl]sDecimal setting caused multiple issues, including incorrect presentation of numbers in Display Client and numeric pad, both sliders and TagWrite/TagRead Cicode functions not converting decimal numbers correctly, failure to insert decimal numbers into SQL database tables. This problem has been resolved.
43376	Cluster names are missing in the messages logged by both TrnSetTable and TrnEventSetTableMS functions.

	Calling the Cicode functions TrnSetTable and TrnEventSetTableMS with [Trend]TrendDebug=4 in citect.ini produces log messages without cluster names, making it difficult to identify the cluster that the trend belongs to. This issue has been rectified.
43547	Acknowledged ON alarms need to be reacknowledged after a restart
	The IOServer code has been changed so that alarm values have an initial quality of GENERIC_UPDATE_INPROGRESS rather than GENERIC_NOERROR. This means that all tag values will not return good quality data by default.
43577	Express Wizard Hangs when no serial ports exist
	On PCs where no serial ports exist, the express wizard would go into a loop. This has been fixed.
43645	GB Automation Interface, oval's 'angle' properties don't appear as expected
	Angle properties set using the Automation Interface functions had values one degree less than expected. The problem was due to incorrect rounding. Example: An angle was calculated to be 119.99999998 and then truncated to 119.
43713	Events are triggered on startup when background polling is enabled and the [Event]InhibitEvent parameter is set to 1
	Events are being incorrectly fired on startup when background polling is enabled and the [Event]InhibitEvent parameter in Citect.ini file is set to 1. This problem has been rectified.
43723	Bug 43723 - [CICODE] IODeviceInfo() gives incorrect IODevice name when querying from different clusters
	Failure Details ========== IODeviceInfo() gave incorrect IODevice name when querying from different clusters Having multiple devices with the same number on different clusters, the function call of: IODeviceInfo(iDeviceNum, 0, sCluster) will return the name of the IODevice incorrectly (it will return the first IODevice in the first cluster). Fix Details ======= The Citect code was changed so that a server for a particular cluster only resolves units for that cluster.
43732	When acknowledging an alarm while a windows user is logged in, the alarm summary shows UserName field as 'SYSTEM'
	From a remote client, or from the local client when in multi-process mode, acknowledging an alarm while a windows user is logged in leads to the alarm summary displaying a value of "System" for the UserName field. This problem has now been fixed.
43735	

# 43872 Cannot view Alarm or Trend Pens in Process Analyst if the logged in user does not have correct privilege

Alarm or Trend Pens cannot be viewed in the Process Analyst if the currently logged in user does not meet the privilege configured for the particular alarm or trend. This problem has now been addressed by providing new citect.ini parameters that allow these security checks to be turned on and off. The new parameters are [Alarm] FilterViewByPrivilege and [Trend] FilterViewByPrivilege. They default to 1, which enables the security checking, and if set to 0 the security check will be disabled, allowing all Alarm or Trend pens to be viewed.

# 43922 Incorrect conversion of periods in the Period field to English format (East Asian languages only)

East Asian languages have a problem converting a localized period value (for example, the value in the Period field of the Trend Tags dialog in Project Editor) to the English format used in DBF files. More specifically, the issue is related to the periods what use week days and names of months. The problem has been fixed.

## 44040 Digital tags on scheduled devices show incorrect values when Citect is restarted

An issue with digital blocking causes cached digital values on remote scheduled devices to return incorrect values on if Citect is restarted. This has been resolved.

## 44058 Shutdown("Server Name") doesn't work in a number of scenarios.

A single citect server process could not be shutdown or restarted as described in the help. Shutdown() function help states that you can stop or restart a Individual Server by specifying the Server name. e.g. Shutdown{"AlarmServer1","",1) Fix Details ======== The program has been changed to add the functionality to allow a single process to be restarted or shutdown as described in the help.

### 44100 Acknowledged, cleared alarms active on redundant server after startup and synchronisation

During synchronization of the alarm server, dynamically set alarm properties were not being set from synchronisation data. This means that when the active alarm server is shut down the alarm properties on the redundant alarm server can be different and alarms may re-trigger or not trigger at all. Fix Details ======= During synchronization of the alarm server, dynamically set alarm properties is now being set from synchronisation data. See also Bug 44678

## 44111 Foreground Cicode "user error"s not cleared preventing subsequent executions of Cicode

Foreground tasks incorrectly remembers a "user error" (e.g. "out of range") preventing subsequent executions of foreground task code from properly executing. For example, preventing tag writes(OP\_STORE operations). This problem has been fixed.

### 44156 Clients that connect to the primary alarm server while it is resyncing do not get alarm data.

The primary alarm server listener is now not opened until after it has finished re-syncing. This means that clients connect to the standby alarm server during this period.

# 44162 Citect communications can be lost/dropped/closed on a mal-functioning/overloaded/unreliable network

Citect communications can be lost/dropped/closed on a mal- functioning/overloaded/unreliable network. Citect code is designed to be network fault tolerant and so it will close and attempt to reopen networking connections. Closing at the wrong level has only been \*proven\* to cause a Citect communications failure in a few extreme cases in the lab (the symptoms were only visible in wireshark traces). This has not been \*proven\* to be a problem in the field, but a few customers have possibly had issues related to this bug. Resolving their network hardware issues seems to have resolved those cases. Logging has been added to record information about opening/dropping/closing Citect network connections and many networking error conditions. This will help us investigate networking issues that might occur in the future. The logging is enabled by a new Citect.ini parameter. [lan] ConnectionLogging = 1 (off by default)

#### 44169 [CICODE] IODeviceInfo "IODevice,P" & "IODevice,S" unsupported in V7.1 (and v7.0)

	IODeviceInfo does not return the correct status for the device when using the ",P" (primary) or ",S" (stand-by) qualifiers. e.g. IODeviceInfo("IODev1,P",3)=0 IODeviceInfo("IODev1,S",3)=0
44237	CiText.Combobox does not work with style type "Simple"
	The selected text in a combobox should be able to be obtained by cicode. When combo box sytle="simple" the selected text could not be obtained. Fix datails: There are two 'internal' combo box implementations, one for each style. The method that returned the selected text for the "simple" style did not selecte the correct internal combobox implementation.
44323	WinFile/WinPrint cicode functions don't capture the image of Process Analyst
	When the Process Analyst control is present on the page and either WinFile or WinPrint cicode functions are called, the image of the control's client area is not saved to the file or printed. This problem was fixed.
44420	TagRead returns the value up to the max decimal value it can display regardless when there is a format specified
	TagRead in v7.10 returned a different result that that returned in v6.10. Example: Enter a value of 123.1234 on a REAL variable tag with a default format of ###.#, then do a TagRead() function and store the return result to a STRING variable tag, the string will contain 123.12340039782 (approx.) The correct result is 123.1 This has now been changed. (Bug 44420)
44432	Items from menu appear at different locations when using different screen resolutions
	Failure Details ========= The submenus from for example the Tools menu (runtime) will display on different locations depending on the screenresolution. The higher the screen resolution the further away from the mouse cursor the submenus will show on screen Fix Details ======== Citect was incorrectly scaling x values of menu positions that should need to be scaled. There is an extra parameters in the appropriate CSV_Example cicode functions to indicate when scaling is and is not required.
44437	Compiler crash when Citect Project is linked via a UNC path and Visual Basic files exist
	This problem has now been resolved.
44464	Pulse() doesn't work, and results in a hardware alarm, on a pop-up when using substitution with data type
	Pulse() doesn't work, and results a hardware alarm, on a pop-up when using substitution with data type. For example, Pulse(?1?) works OK, but Pulse(?Digital 1?) doesn't work and raises "Invalid Argument Passed" h/w alarm. Also; Pulse(?1?) doesn't work when ?1? isn't used anywhere else other than Pulse(?1?). The compiler has been changed so that it ignores 'digital' and other types in Pulse(?Digital 1?) The labels.dbf has been changed so that Pulse(?1?) works when ?1? is not used elsewhere other than Pulse(?1?)
44505	Alarm index file corruption caused by removing and adding alarms
	Alarm index file corruption can be caused by adding and removing alarms from the project and then starting Citect. The problem is related to the deleted alarm ids being re-used by the newly created alarms.
44586	A popup window containing many symbol set array objects takes a long time to display
	This problem is observed when a user launches a popup window which contains many symbol set objects each with many array symbols. This issue has now been resolved.
44638	"Live Update" I/O Devices form parameter was working inappropriately
	To fix the problem: - Live Update was completely decoupled from Auto Refresh; Live Update box is now disabled by default, Auto Refresh is never disabled - An additional section flag has been added to the file "tagdriv.ini". It is called "SupportLiveUpdate" and it has three possible values: "true" meaning that

the Live Update box is enabled and it's default value is TRUE; "false" meaning that the Live Update box is enabled and it's default value is FALSE; "disabled" (default) meaning that the Live Update box is disabled and it's value (FALSE) cannot be changed

# 44640 Several settings in Citect.ini are not saved properly by Computer Setup Wizard

When running Computer Setup Wizard, the following settings were not saved: o [Win]ScreenSaver o [Page]StartupCancel o [Win]AltSpace This problem has been fixed.

### 44678 Alarm High value property is not being transmitted to the redundant server

When alarm properties are dynamically changed, the changes are not transmitted to the redundant server. This means that when the active alarm server is shut down the alarm properties on the redundant alarm server can be different and alarms may re-trigger or not trigger at all. Fix Details ======= When alarm properties are dynamically changed, the changes are transmitted to the redundant server.

# 44768 Names of graphic pages that are displaying alarms are case sensitive

Names of graphics pages containing ANs for displaying the alarms are case sensitive, meaning that cicode developers must observe type casing precisely. Otherwise, calling, for example, PageDisplay("Alarm") on the page named "alarm" will not update the ANs as expected (the blank ANs symptom). This behaviour is incorrect and has been modified to make page names case insensitive.

# 44829 TagGen does not generate Trend and Alarm tags when import from OFS with some language settings

TagGen uses an OLEDB provider with collation set to general. With some language settings, such as Russian TagGen does not import correctly - this has been resolved.

## 44839 Alarm history was not read from redundant server

Alarm history was not read from redundant server if current server does not have alarm save files and both servers are shutdown

## 44842 Could not search for Trends Tag using v7.0 process analyst/Citect response slow

When the customer tries to call the "search" from the Process Analyst, the search would hang for about 1 minute and then an error message would pop up saying "CTAPI connection is offline". This was not reproduced exactly in-house; However, with the customer's project (attached to the URL), the search would take approx 7 minutes to return the trend tag list, so this \*may\* be related. When the problem was manifesting, the kernel window would respond very, very slowly. The problem occured for the customer and in-house for single process configuration. The problem was not noticable when using a multi-process configuation. Fix Details =========== Citect changed to process more kernel tasks when the windows system is in an idle state. Extra logging was added to enable us to detect if a connection was terminated due to slow response; "IPCReadMemory: Disconnection due to late or missing heartbeat".

## 44851 Graphics builder may take a long time to load a page which contains many genies or objects

Pages loaded via the graphics builder that contain many genies or objects may take a long time to load. By setting the ini parameter [CTEDIT]CTGMASTERFASTLOAD=1 long load times are cut down substantially.

#### 44858 Genie colours are not displayed correctly when using [Animator]FastDisplay=0

When loading graphic elements with linked details (e.g. F\_ONCOLOUR, F\_STATECOLOURS, etc.) object properties were being incorrectly overwritten with linked object object properties when using [Animator]FastDisplay=0. Graphic elements should look the same regardless of the [Animator]FastDisplay setting Example: The PLS\_Include project contains the pls\_meter.generic\_meter genie. The bus bar color within this genie will not change with the rest of the bus section if [Animator]FastDisplay=0. If [Animator]FastDisplay is set to 1, it will work correctly. If we deenergise this bus bar (set TEST\DI\_02 to 1), the color will turn green. However, the busbar within the genie will not

	change color. It will remain red. If [Animator]FastDisplay=1, all the colors will change correctly. Fix Details ======= When loading graphic elements with linked details (e.g. F_ONCOLOUR, F_STATECOLOURS, etc.) the program should not overwrite object properties with linked object object properties if the object properties have been set.
44906	Numeric updown control for Page scan time in page properties dialog accepts -,+ and 0 values.
	The Page scan time in the page properties dialog accepted -, + and 0 values. This could lead to an exception or communication error at runtime. This issue has now been corrected with a minimum accepted time of 1.
44908	TagInfo, TagInfoEx, AssInfo, AssInfoEx functions may return values with lost precision
	TagInfo, TagInfoEx, AssInfo, AssInfoEx functions do not correctly obtain a tag's raw or engineering scale values and lose precision when the value is returned. For example, a value of 1.10 may be returned as 1.100000024 by any of these functions. This problem has been resolved.
44920	Comment field value of infoform()dialog is not being shown as per the tag definition. Always shows the same comment.
	The _InfoFormUpdateForm function in Info.ci contained a loop that terminated at 10 instead of 11. It now terminates at 11.
44924	Comment field of alarm summary page flickers then disappears
	In the event of one or more alarm servers in a cluster being unavailable, string fields in alarm summaries (including the comment field) would display briefly then go blank. This has now been fixed.
44929	Alarm index file corruption.
	Potential Alarm index file corruption has been alleviated by writing the index file afresh whenever the alarm summary file is written.
44969	Advanced Alarm Filtering does not work on the web client
	The Advanced Alarm Filtering dialog box does not appear or it closes immediately when opened in the web client. This issue has been resolved.
44982	AlarmActive will always return 0 on start-up when running in multi-process mode
	The AlarmActive Cicode function will always return 0 on start-up when running in multi-process mode even if active alarms exist. An alarm needs to change state (e.g. go from ON to OFF) for function to start returning the correct value. This does not occur when running in single-process mode. Fix Details ========= AlarmNewConnect = TRUE is now being set when the AlarmServer receives the MSG_READ_SORT_DATA message. The MSG_READ_SORT_DATA message is sent by the client after the the client alarm cache is create which happens after the connection to the AlarmServer is made. Setting AlarmNewConnect = TRUE causes the AlarmServer to broadcast the cache data at the correct time and that fixes the problem.
44990	Trend dates display incorrectly with German localisation (CSV_Trend_GetDate)
	Using the CSV_Include templates, when displaying a trend on the single trend page the start/end date shows the first letter of the month cut off. Example: October will display as "kt" rather than "Okt", This seems specific to the German installation of Vijeo Citect as the English version doesn't have a problem displaying. Fix Details ======== The fix for this is to change the cicode so that it constructs the string out of individual date component rather than trying to extract them from a formatted string.
45056	Cluster connections were being activated incorrectly
45056	Cluster connections were being activated incorrectly  Clusters should be created disabled (not connected) On startup clusters should be connected if * there is no cluster list * the cluster appears in a cluster list // [Client]Clusters = C1, C2 * the cluster must be present because the servers that belong to them are running in this process.
45056 45089	Clusters should be created disabled (not connected) On startup clusters should be connected if * there is no cluster list * the cluster appears in a cluster list // [Client]Clusters = C1, C2 * the cluster must be

	The Citect OPC server was performing write operations and updating its internal cache values but not sending subscription notify messages to clients. This has now been fixed.
45121	Graphics Builder may crash when upgrading projects or updating pages on very large projects

unpredictable ways. Fix Details ======== The compiler now generates an error if a .RDB file exists but cannot be removed prior to it being recreated. If the file is readonly the compiler will generate an error 'Cannot open file'. If the file is open in another process the compiler will generate an error 'File locked'.

### 45387 Trend process intermittently produces a "C++ run-time error popup"

The trend system requires exclusive use of trend history files periodically. If some other process is using these files at that time, a "file sharing violation" can occur. This is an MS Windows condition reported by the operating system back to the Citect application. Citect normally handles this condition, but in some specific situations, the error is not handled and the run-time error is presented to the user. This has been corrected so that the run-time error is not presented to the user. Instead, the user will see a hardware alarm.

## 45475 WinNewAt() using mode 1 does not open a page child window

WinNewAt() using mode 1 opens a normal page instead of a page child window. Calling PageGoto() within this window does not close it. The issue has been resolved.

# 45531 Fixed #COM when server running under OS with non-English locale settings

The bug is critical as it potentially affects all language versions other than English if the language does not convert upper case characters to lower case as English language does, in particular Turkish and some Asian languages are affected. If a tag name contains at least one such character, the tags fail to resolved and will cause #COM.

# 45647 Page navigation from foreground cicode results in a crash

Doing page navigation (e.g. PageNext(), PagePrev() etc.) from inside foreground cicode tasks (e.g. 'while page shown' events) results in a crash. Attempts to do this will now result in a hardware alarm saying: "Can't swap pages from foreground" Customers experiencing this hardware alarm will need to reengineer their projects so that page navigation functions are called from background tasks, keyboard events etc.

## 45673 Both TagInfo and TagInfoEx functions are unable to get the network number of the I/O device

Both TagInfo and TagInfoEx functions were unable to get the network number of the I/O device as defined by the Number field of the I/O Devices form in the Project Editor. This problem has been solved by adding the new type of information called Network Number (nType = 21).

# 45674 SubscriptionGetAttribute() Cicode function does not provide cluster context, even when subscribed.

This bug was apparently introduced by the Tag Point count (licensing) fix for single cluster projects, bug 36958. That fix removes the Cluster name from the Subscription details when operating in a single Cluster environment. The Side effect of that leads to this bug. This problem has now been fixed.

#### 45675 "Unknown alarm update type" message is shown in the kernel window

In the alarm server redundancy configuration, when either primary or standby server starts up, the process of synchronising the alarms between servers can result in the "Unknown alarm update type" message displayed in the kernel window. This problem has been fixed.

# 45676 Time stamped digital alarms with tag values in the description can lead to shutdown crashes and missing alarm summaries

A shutdown crash may occur when exiting citect while repeatedly triggering time stamped digital alarms with tag values in the description. In addition the same alarms may not generate expected alarm summary events. These problems have now been resolved.

## 45682 Incorrect location of a popup menu when running in multimonitor mode

When running in multimonitor mode, the DspPopupMenu function displays a popup menu with an

	incorrect offset along both X and Y axes. This problem has been fixed.
45686	When used in conjunction with a filter, AlmSummaryDeleteAll() should only delete the selected alarm records
	If a filtered browse session is opened using AlmSummaryOpen() and the AlmSummaryDeleteAll() function is used, *all* alarms summary records are deleted rather than just those in the filtered browse list. Example: Deletes 1 category of alarms sFiltre = "CATEGORY=" + IntToStr(iCat); iHnd = AlmSummaryOpen(sFiltre, "", ""); IF (iHnd <> -1) THEN AlmSummaryDeleteAll(iHnd); END Fix details: When used in conjunction with a filter, AlmSummaryDeleteAll() now only deletes the selected alarms.
45698	Cannot re-open the 'New 100% Scale value' dialog window after using the Close (X) button to close it.
	If you close the 'New 100% Scale value' dialog window using the Close (X) button at the top right corner, rather than by 'cancel', then you won't be able to open it again.
45726	Changes to underlying cicode caused CSV_InstantTrend() to run slowly.
	Changes to underlying cicode caused CSV_InstantTrend() to run slowly. This has now been rectified.
45742	Web Client doesn't open graphics pages with non-English names in IE7
	When adding graphics pages to your projects with names containing locale-specific characters (non-English names), the Web Client running in IE7 will not be able to download and display such pages on screen. The issue has been fixed. Note that this problem doesn't apply to the Display Client, and to versions of IE prior to 7.
45746	Decimal digits truncated in vertical scale in foreign locales
	When changing the vertical scale in ProcessAnalyst you can enter value with decimal in it. For regional settings that use "." (dot) as decimal separator, this works. But for regional settings where the decimal separator is different, such as a comma ",", the decimal part was truncated. This problem was affecting all versions of ProcessAnalyst prior to this fix.
45763	A crash was caused by code incorrectly passing a pointer to a pointer to a error routine rather then just a pointer to a DCB
	The code no longer passes a pointer to a pointer to a error routine rather then just a pointer to a DCB.
45801	Pasting a genie on a page (with many existing genies on page) will crash CtDraw32.exe
	When the operator attempts to add too many items on a page (create too many annimation points) and the anpoints.ALLOCHND table reaches 32767 items in size, the graphics builder would crash. The program now does not allow the anpoints.ALLOCHND table to exceed 32767 items in size. If this is attempted, an error message will be displayed; e.g. "ERROR - File(.\tbl.c) Line(460) - tblAllocHnd - too many items in table, Table[29]=anpoints.ALLOCHND, Length=32750
45848	Crash on startup with scheduled devices
	Changed functionality during initial connection to scheduled devices can crash with certain drivers (eg. MelsecNet, ModNet).
45858	Cannot re-connect to scheduled I/O devices after network interruption
	When a remote unit goes offline, pending reads to the remote device were not completely removed. When the remote came online again pending reads prevented new subscriptions being made and the IOServer would freeze. This issue has been fixed by cleaning up pending reads when changing the device status.
45889	The maximum value of the parameter [CODE]ShutdownTime is too low
	The [Code]ShutdownTime parameter had a maximum of 120 seconds. A maximum of 3600 seconds (60 minutes) was required. The program has been changed so that the [Code]ShutdownTime

	parameter now has a maximum of 3600 seconds (60 minutes).
45982	Process Analyst Pen Statistics may not refresh in Object View
	A problem was identified that under certain conditions the statistics (Min, Max, Average) may not be refreshed in Object View window of Process Analyst. The problem was happening when auto scrolling was disabled. The problem affected all versions and branding of Citect SCADA and web Client using Process Analyst. The problem was rectified with this fix.
46084	Added Trace logging for Report Server and Accumulator subsystems.
	There are now two new CITECT.INI settings for the Report Server and Accumulator subsystems that enable new trace logging messages: "[Report]Debug" and "[Accumulator]Debug". When set to "1", entries appear in the appropriate SYSLOG.DAT for the Report Server Process. Report Server entries are prefixed by the string "ReportServer:", and Accumulator entries prefixed by "Accumulators:".
46110	Super genie assignments when using alarm properties as tags fail in v. 7.10 SP2
	After upgrading to Vijeo Citect 7.10 SP2 a problem was introduced to super genie assignments when using alarm properties as tags. This problem has been rectified.
46117	The sound for unacknowledged alarms is not played when the CSV_Inlcude project is used in non-English environments
	To play a sound for unacknowledged alarms, the CSV_Include project applies a locale sensitive filter to the alarm list returned from the server. The filter works in the English environment, but fails in non-English ones, and, as a consequence, the sound is not played. This problem has been resolved.
46213	Alarm printing to network printer does not print the latest generated alarm
	When using a network printer, the latest generated alarm may not be printed immediately or may be stuck in the spool until the next alarm is generated or until CitectSCADA is shutdown. This problem has been resolved.
46226	Callback function for an Alarm property subscription is called every alarm ScanTime
	The callback function for an Alarm property subscription is called every alarm ScanTime Fix Details ======= The callback function for an Alarm property subscription is now not called every alarm ScanTime
46265	Citect runtime crash when the "ObjectCallMethod()" cicode call with invalid Object AN
	Fixed Citect runtime crash when the "ObjectCallMethod()" cicode function is called with invalid Object AN. This only occured when the cicode was in a file.
46302	Super Genie associations do not show up on popup window
	Cicode functions involving Ass() function failing. Rectified association of a Super Genie with Alarm Property Tag causesing page to be blank.
46328	DNPR Clients show blank screen when switching active with Usurp
	Resolved problem when running redundant devices and using the RequestUnitActive.Standby control tag to change active IOdevices the screen will become blank on the standby when a new page is selected. The "DataSourceStatus" messages were sent to RemoteTagResolver before it was created. The RemoteTagResolver was therefore not be aware of all the datasource. when resolving the tags. The fix has been implemented to messages send when the connector received the first request from the client (The RemoteTagResolver object will be created and initialised by then).
46333	CiCode function IODeviceInfo(IODevice,17) showing server name the server is down
	CiCode function IODeviceInfo(IODevice,17)was fixed to return empty string when the server(s) are down.

### 46431 ABCLX writes fail without error

When writes are sent in quick succession the IOServer attampts to block them together before passing to the driver for action. ABCLX does not support multiple writes and will ignore more than one write request. ABCLX informs the IOServer that it cannot support blocked writes, but this was ignored. This has been rectified.

## 46437 Initial values do not update with scheduled IO

With remote devices the blocking optimisation can only be performed after initial connection. The IOServer uses an initial default to obtain the first update and then optimises this. The original subscription is still until a new subscription is made, for example by leaving and returning to a page. This has been resolved, tags now update after initial connection.

## 46439 Legacy Trend Plots displayed incorrectly

Under some circumstances legacy trend plot images created using the Plot() cicode functions were being visually corrupted. This issue has been resolved and plots are now showing correctly.

## 46475 Cannot write to variable tags from CiVBA function

Changes introduced by bug 40069 removed the initialization of CiVBA code and requests on pages. Fix Details ======== Added back in the initializes of CiVBA code to PageOpen.

### 46540 WebClient failes to start with error: failed to Load Database ' DigAlm' (File Not Found)

When [General]TagDB=1, WebDeployment will now copy all required alarm RDB files to the webclient project. Otherwise, alarm RDB files will excluded.

# 46546 Results of ctapi calls return NO decimal separator, when Windows decimal separator is a comma

Results of ctapi calls return NO decimal separator, when Windows decimal separator is a comma. CTAPI calls for a REAL value will return eg: 512 when the actual value is 5,12. This only happens when the Windows decimal sperator is not a dot (eg: on French or German OS). A windows API call was converting internal values to and from strings based on regional settings. Fix Details ========= A different windows API call was used to ensure that internal values were converted to and from strings based on invariant settings.

#### 46560 Scheduled device reports "Request size too big"

Initialisation of a scheduled device could cause the incorrect unit to be used in checking blocking parameters. This could result in invalid blocking size and a "Request size too big" message plus an incorrect name being reported for the device.

### 46564 Write to tag fails following hardware alarm: Value is out of range (strmid("test", 3,20))

strmid("test",3,20) generates an overflow error because the parameters (source string length of 4, offset of 3 and length of 20) cause an overflow condition. A safety feature of Citect has following tags assignment statement not to be processed until the overflow condition is cleared. This overflow condition processing stop should be restricted to a very small section of CiCode (e.g. the line on which the problem occurred) Example: If StrMid("test",3,32) = "t" then <= this causes an overflow condition digtag1 = 1 <= this line should work (it was in 6.10 but not in v7.0 and v7.10 prior to this fix) Errlog("Done!") end Fix Details: When v7.0 was introduced the cicode operators changed. A two step tag value store process was replaced with a one step process and the handling of overflow errors was made to be more restrictive than in v6.10 The bugfix for Bug 46564 rectifies this issue.

# 46661 Re-enabling an alarm sets is as type CLEARED but still displays in alarm list and needs to be cleared again

There were inconsistencies and errors in how different types of alarms in different states were displayed/handled.

46666	MsgBrdCst has a limit of 32767 messages
	MsgBrdCst has a limit of only 32767 messages while similar functions like MsgRead and MsgWrite can handle values of more than 32767. This problem has been resolved.
46670	Unable to change initial value of a 'disk' tag that uses scaling
	If a 'disk' tag has scaling range that doesn't include zero (eg. raw scale 1-100, eng scale 0.1 - 10) then, when you initially start citect runtime, the tag will have a value of zero. You won't be able to input a new value, (by Arg1 or FormNumPad etc) even if a new value is within a valid range. If you do TagWrite frist, after that you will be able to input a new value. This started happening in v7.0. Version 6.10 didn't have the issue. Fix Details ========= After the operator enters a number using FormNumPad or CSV_Form_NumPad, the 'Out of range' error (that occurs when a using an uninitialised DiskPLC tag with a non-zero minimum engineering value) is cleared. Note: v7.20 implements persisted memory PLCs which initialise tag values to the minimum engineering value.
46676	If [alarm]DisplayDisable=1 when doing alarm.disabled=0 the alarm stays in the disabled page
	If [alarm]DisplayDisable=1 and alarm properties are published you can disable an alarm by doing alarm.disabled=1. However when you do alarm.disabled=0 to re-enable the alarm it does not work. The alarm stays in the disabled alarm page. The only way to re-enable the alarm is to go to the disabled alarm page, right click on the alarm and select enable. This problem did not exist in 6.10 In the normal release of 7.10, when you have [alarm]DisplayDisable=1 the alarm property alarm.disabled always returns 0 so maybe that is why nothing happens when you do alarm.disabled=0 as the value is already 0. But in 6.10 alarm.disabled always returns 0 as well but there is no problem with the alarm staying in the disabled alarm queue. The issue of the alarm.disabled property always returning 0 is fixed in bug45202 and a hotfix was built in bug46441. With the hotfix installed when you do alarm.disabled=0 to re-enable the alarm you can see the value of the .disabled property change from 1 to 0 but the alarm stays in the disabled alarm page.
46759	TagInfo mode 16 called from kernel returns an empty string variable tags when comments are in Japanese (or non-ascii characters e.g. "äÄöÖüÜÃÅ,")
	TagInfo("", 16) exectued from the kernel was returned nothing when tag comments are in Japanese or non-ascii characters e.g. " $\tilde{A}f\hat{A}$ $\tilde{\mu}\tilde{A}f\hat{a}\in\tilde{\lambda}\tilde{A}f\hat{A}$ $\tilde{A}f\hat{A}\tilde{A}f\hat{A}\tilde{A}f\hat{A}\tilde{A}f\hat{A}\tilde{A}f\hat{A}\tilde{A}f\tilde{A}f\tilde{A}f\tilde{A}f\tilde{A}f\tilde{A}f\tilde{A}f$
46795	Slow page load times in Graphics Builder when a local project has a UNC path
	When the path for a project on a local drive is specified in UNC format, Graphics Builder has much slower page load times than when the path is specified using the drive format (eg 'c:')
46860	Crash on startup when first connecting to a remote io device
	A scheduled device could cause a crash during initial connection. This issue has now been rectified.
46862	IODevice set to Memory mode accesses incorrect memory
	When an IODevice is set to Memory mode there is no longer an incorrect memory access at startup
46883	When you set the page resolution in graphics builder there is a limitation where the maximum value you can select is 4096.
	Previously, the maximum page resolution width and height was 4096. The page resolution in graphics builder can now be set up to a width of 16384 or a height of 16384 in any combination so long as the maximum area does not exceed 4096 x 4096.
46889	Unable to compile project when calling a public sub in other CiVBA files
	The problem only occurs when a call is made to a routine that is defined in a different .BAS file that has not yet been read and compiled (the order is alphabetical on filename). The fix is to pre-read all of the .BAS files to create a list of function names. This list is then used to stop the Citect code incorrectly creating global *variable* definitions for functions/subs that are defined in later .BAS files.

# 47111 Client alarms lists stop updating after a period of time.

Alarm lists on clients associated with multiple Alarm clusters may stop updating after a period of time. This issue has been rectified.

# 47125 Logging introduced in HF710SP246715 floods the syslog when the standby server is unavailable

These messages were being logged when they shouldn't be; (they were not actual error conditions) 2010/03/16-14:50:09.156 TranWrite(1, 13): Name=StandbylOServerCluster1, State != TRAN\_STATE\_ONLINE, state=2 2010/03/16-14:50:09.172 TranWrite(1, 13): Name=StandbylOServerCluster1, State != TRAN\_STATE\_ONLINE, state=2 2010/03/16-14:50:09.359 TranWrite(1, 13): Name=StandbylOServerCluster1, State != TRAN\_STATE\_ONLINE, state=2 ... 2010/03/16-14:50:13.171 TranWrite(1, 13): Name=StandbylOServerCluster1, TranWrite failed before secure login completed (msg: 13) 2010/03/16-14:50:13.327 TranWrite(1, 13): Name=StandbylOServerCluster1, TranWrite failed before secure login completed (msg: 13) 2010/03/16-14:50:13.359 TranWrite(1, 13): Name=StandbylOServerCluster1, TranWrite failed before secure login completed (msg: 13) ... 2010/05/21-18:04:13.720 TranWrite(4, 10): Name=lOServer\_SCluster1, TranWrite failed before secure login completed (msg: 13) ... 2010/05/24-17:03:11.426 TranWrite(5, 231): Name=Cluster1Alarm, TranWrite failed before secure login completed (msg: 231) ... 2010/04/13-10:50:07.849 ReportServer: (Redund MSG\_ERROR=8200) ... 2010/05/25-09:52:09.784 TranWrite(5, 233): Name=Cluster1Alarm, State != TRAN\_STATE\_ONLINE, state=2

### 47167 Packing libraries in Graphics Builder may crash and may cause library corruption

After replacing a graphics library object with another type in Graphics Builder, running Pack Libraries may crash the application and may also cause the corruption of the graphics libraries. This problem has been resolved.

# 47245 Dial up IO device in memory mode will still dial out

The dialup system did not refer to the Memory mode when adding to the dial schedule. This has been rectified.

# 47436 IODevices fail to recover from "Driver not responding" errors

This issue has now been resolved.

### 47647 FileXXXX cicode functions do not validate handles

File handles passed to FileXXXX() cicode functions were not being validated before being passed through to OS file functions. Thus, handles to other OS objects could potentially be closed inadvertantly because of a user cicode error. Depending on the affected object, this could be benign, or could lead to a crash. This has now been fixed.

#### 47879 With CitectSCADA ODBC, tag name/value query fails if any tags fetched are #COM

Changeover to PSI in 7.0 caused an error to be returned from CitectSCADA ODBC Server unless the tag quality is good. This has been fixed by reverting to previous behaviour of ignoring bad quality tags and returning zero instead.

# 47880 Graphics objects are distorted during runtime when pasted on top of a dynamic object

Ellipses, arcs, and pies may be rendered incorrectly during runtime if they are dynamic or if they are pasted on top of a dynamic object. This problem has been resolved.

### 47881 Text are distorted during runtime when pasted on top of a dynamic object

Text may be rendered incorrectly during runtime if they are dynamic or if they are pasted on top of a dynamic object. This problem has been resolved.

# 47923 Multiple alarm state changes within the same second may lead missed alarm

If an alarmed field point changes state multiple times within the same second, not all of the

	corresponding alarm events may be generated. This can lead to utilities such as Process Analyst to display an incorrect alarm state.
47938	Increase max value of [Alarm]SummaryTimeout
	The maximum value of [Alarm]SummaryTimeout has been increased from 20000 to 35791394.
48645	Alarm properties read using TagRead() result in error "423"
	The default quality of alarm property values was "pending". When alarm properties were read using TagRead() an error "423" resulted. The default quality of alarm property values are now "good" rather than "pending".

# Originally resolved in Service Pack 2

These fixes are included in Service Pack 3.

lssue Number	Issue Title and Description
24921	The tab, enter and return keys do not function as expected on popup forms in the WebClient
	When a user presses the tab, enter or return key on a popup form in the WebClient, the key is not processed as expected and has no effect. This problem has now been resolved.
38507	Minimum, Maximum, and Average Response times of I/O Server in Kernel are incorrect
	Some of the statistics (Minimum, Maximum, and Average) related to driver run time reported in Kernel:General and CitectInfo() were incorrect. In addition "Totals" always reported as 0. This issue has been resolved.
39939	Dynamically optimized writes do not work in v7+
	Some code for dynamically optimizing writes was removed in v7.00, resulting in degraded write performance compared to v6.10. This code has now been reinstated.
42072	Shutdown() mode 3 doesn't log out of Windows if Citect not run from Configuration Environment
	When Citect Runtime is launched with no command line arguments, it successfully locates the correct 'default' INI path, but it is not storing it in the correct location for later use with RsCite32.exe. The correct 'default' INI path is now stored in the correct location for later use with RsCite32.exe.
42266	AlarmAck() doesn't work when called from alarm process
	Allow AlarmAck() to operate for ALM_CATEGORY and ALM_PRIORITY when it is being called from CiCode where there is no graphic page because no graphic page is required for AlarmAck(ALM_CATEGORY,) and AlarmAck(ALM_PRIORITY,).
42463	FileFind can incorrectly return that no files or folders are found
	Doing a FileFind() loop to completion can cause subsequent FileFind() attempts to fail with the appearance of there being no files when in fact there are
42472	InfoForm() Function no longer shows the address field for the Tag Properties
	When InfoForm() function is called it shows a dialog box with Eng_full and Eng_full instead of Eng_Zero and Eng_Full. This worked in CitectSCADA version 7.0 and was broken in V7.10. This has now been resolved.
42474	Crash when using AlarmSetDelayRec() when no redundant alarm server was running
	When a project is configured with redundant alarm servers, but only one alarm server is running, processing alarm updates may result in a crash. This has now been resolved.
42504	Importing tags from OFS or refreshing tags may corrupt the variable database
	Under certain circumstances, errors encountered during an OFS tag import or refresh may result in the variable database being corrupted. This issue has now been resolved.
42523	String values that are sent from the Active X Handler do not match the received string values in Citect
	String parameters passed into successive ActiveX/Citect event handler calls were being overwritten by the last call. This has now been fixed.
42548	

		Cicode that is configured to run when a page exits via the "on page exit command" field may not be executed as expected. Further changes have been made from the Service Pack 1 fix. This issue has now been resolved.
42650	CtApi READs return full decimal precision regardless of the format specified in the variable configuration	
		Code has been added to allow customers to indicate whether or not they want the values rounded to format (default: Round to Format). New environment setting to support the selection in Citect.ini [CtAPI] RoundToFormat =1. Note: Default is RoundToFormat =1

### 43037 Alarm Server redundancy problems

Alarm Servers did not re-establish redundancy after comms interruption and did not send property updates that were made (using AlarmSetTHresholdRec or AlarmSetDelayRec) while another server was shutdown, these should have been queued so that the updates could be sent to the server that was subsequently started

### 43045 FormListBox buffer doesnt get refreshed after selecting a particular option

The internal scratch buffer used to hold the results from a "get text" message was not being cleared. This has now been fixed.

### 43095 CSV\_MessageBox() fixes for timeout, duplicates and cancel mode

Fixes and improvements have been made to the CSV MessageBox handling and control. Timeouts now work and return a new error code. Cancellation of a box has been improved. Invoking duplicate boxes has been fixed and now returns its own cicode error code. Users are advised to read the header of the cicode function CSV\_MessageBox() in CSV\_MessageBox.ci in the CSV\_Include project directory, for full details.

### 43126 Cannot write to the delay property of digital alarms at run time

When the user tries to modify the delay property of a digital alarm during runtime they receive a "PLC Server Write location is protected" error. This has now been resolved.

### 43226 Text is displayed with different quality between Runtime and Graphics Builder

Text objects drawn on the Citect graphic pages during runtime were not being anti-aliased correctly (they did not look smooth). Disabled/Greyed text objects drawn on the Citect graphic pages during runtime were not being anti-aliased correctly (they did not look smooth) and were not drawn using a grey text color. Text objects are now drawn using correct anti-aliased (they now look smooth). Disabled/Greyed text objects are now drawn using a grey text colour (they now look smooth and disbled).

# 43247 Citect crashes on shutdown when shutting down a project containing just an alarm server under some circumstances (timing).

The shutdown code was changed to handle an exceptional condition.

# 43278 CSV\_Include 'Export to File' feature doesn't work due to tag names truncation

On export of trend data to .dbf pen names (clustername+.+trendtagname) are truncated to 10 characters. Pen1=Cluster1.trend1, Pen2=Cluster1.trend000002, Pen3=Cluster1.trend000003 Export to .dbf Column1=Cluster1.t, Column2=Cluster1.t, Column3=Cluster1.t and data will be missing from the columns. The export code has been changed such that if any of the pen names are too long and all the pen names are from the same cluster then the cluster name is stripped. If any of the pen names are still too long then all of the pen names are changed to Pen1, Pen2, etc.

# 43358 New Cicode functions: TagResolve & TagUnresolve

Two new Cicode functions have been introduced, which permit resolving a tag without actually subscribing to it. This may be of use in tuning for faster page changes. The parameters passed to each function are exactly analogous to TagSubscribe and TagUnsubscribe.

For more information, refer to KB Q5579.

### 43524 Cicode Functions >32 characters can cause compile errors

If a CiCode function name exceeds 32 characters in length an error, "tag already defined" will be generated at compile time. The compiler now allows CiCode function names to be up to 250 characters in length before generating an error, "Function name is longer than 250 characters".

### 43540 The Cicode function TimeSet has been re-implemented with limited functionality.

The Cicode function TimeSet was removed in CitectSCADA 7.10 but has now been re-implement with limited functionality. TimeSet sets the new system time. You can set the time only on the computer which

this function is called. Time/date functions can only be used with dates from 1980 to 2035.

Please note that if the user calls TimeSet but does not have privileges to change the system time they will receive a hardware alarm indicating this. Please note that when using Vista, UAC must be disabled in order for the time to be set.

Syntax: TimeSet(Time)

Time:

The time/date variable to which the new time is set. Sets the time on this computer only.

Return Value

The error status of the set.

Example:

! set the time to 11:43 on June 23 1993

time = StrToTime("11:43:00") + StrToDate("23/6/93");

TimeSet(time);

### 43574 Changing system time to time in the past results in stale values

Changes in system time were not being notified to server processes, resulting in stale values being display and used for alarms, trends etc. This has now been fixed.

## 43839 Bulk writes via the OPC Asynchronous write methods can lead to a crash.

The OPC server interface has two asynchronous "Write" methods. We failed to copy the incoming data into memory that we controlled the lifetime of. This has now been corrected.

# 43843 Various OPC Server crashes related to abnormally disconnected clients.

Four problems were found and fixed:

- 1. When clients disconnected abnormally, the cleanup procedures could result in a crash.
- 2. Zombied Group threads were continually trying to send update notifications to the clients that had abnormally disconnected.
- 3. Cached ctAPI protocol objects were improperly being used after they had been freed.
- 4. Memory containing Group objects were being deleted twice, in certain circumstances.

# 43955 Client switchover delay when active io server is shutdown

When the currently active io server is shutdown, switchover to a lower priority redundant server can be delayed for 10 seconds or more on client processes.

Clients may exhibit #COM or become unresponsive during this time. This problem has now been resolved.

### 44002 Crash while printing a rich edit report

A certain combination of characters in a critical location can cause Rich Text printing to crash, this has been corrected.

### 44076 Standby IO Server displays an incorrect dialogue if modems are only configured on primary

When a project is configured such that it has modems on the primary IO Server but no COMX board on the standby IO Server, the Standby will incorrectly advise against starting and provide the option to shutdown.

The error message "Failed to find a COMX board defined on this server. A COMX board definition is required for communication with remote I/O Devices" is displayed. This issue has now been rectified.

# 44078 Changing Page-Scan time doesn't effect the Tag subscription Poll-Times.

When a page is first opened, all of the Tags used by the page are subscribed using the current Page-Scan time. These subscriptions live for the duration of the page so when the Page-Scan time is changed, the existing subscriptions are not effected.

This has now been changed such that when you use the CiCode PageSetInt(-2,...) command, it now resubscribes all of those Tags using the new Page-Scan time.

# 44079 Crash occurs when sending an ctapi login message with the password field longer than 256 characters.

Testing ran a series of tests with a large number of malformed CtAPI messages to test V7.0 security. Three malformed messages provoked failures. The code that handles CtAPI messages was changed to deal with the malformed messages and prevent any failures or warning conditions.

# 44080 Webclient does not display the configured startup page

Sometimes when the webclient is started it does not display the configured start up page. This issue has been resolved.

# 44082 CitectSCADA runtime may crash on shutdown if it has been processing timestamped digital alarms

While using timestamped digital alarms, users may find that the CitectSCADA runtime may crash during shut down. This problem has now been resolved

### 44087 When all connections lost on multiple NICs, the client may show stale data instead of #COM.

When using network redundancy via multiple Network cards, complete network failure on all cards may result in a client displaying stale data instead of correctly flagging the tags as Bad Quality and forcing the display of #COM. This issue has now been resolved.

# 44262 CSV\_Math\_Rounddown() and CSV\_Math\_Truncate() produce incorrect results for some input values

CSV\_Math\_Rounddown() and CSV\_Math\_Truncate() for some input values produced incorrect results due to rounding off at inappropriate points in the Cicode. This has been rectified.

# 44266 Shift key combinations can not be entered on dynamic text objects

When a user enters a shift key combination on a dynamic object, no character is displayed. For example if the user types "shift + f" on a dynamic object the 'F' character is expected to be displayed however no character is displayed.

# 44357 Change since upgrade from SP1, reports require an output device to run cicode in a report file

Reportserver did not run (execute reports) when an Output device had not been specified in the reports form. This was introduced when Bug 40006/Bug 42531 was fixed.

The code has been changed to allow reports to be processed when there is no output device.

### 44394 [Code]WriteLocal=0 results in flickering values on screen.

An inconsistency in the way caches were updated across the IOServer may result in flickering values on screen. This has now been corrected, so that all caches in the IOServer behave according to the [Code]WriteLocal ini parameter.

# 44512 No indication when a process is unable to load a dll

During initialisation the system loads up certain server dlls(e.g. IOServer and TrendServer). The system was not checking whether or not the load was successful. The system now checks for a failed dll load and aborts with a error message. This issue has been resolved.

#### 44711 PSI is slow to switch over from standby to primary device

The PSI connector was not proactively sending datasource notification messages when a new session

	was connected. Thus, changeover only occurred when the next resolve period expired, and differed greatly from one client to the next. This has been fixed by forcing a re-resolve when a new, higher priority datasource comes online.
44907	Invalid page scan times accepted by PageSetInt()
	Invalid page scan time settings were accepted by the cicode function PageSetInt(), with the use of these settings possibly resulting in a crash. This issue has now been corrected.
45550	Tag writes to PLCs may be written out of order

Values written to tags were being written out of order in some cases. For example, the sequence TagWrite("intTag1", "1"), TagWrite("intTag3", "12345"), TagWrite("intTag2", "2"), TagWrite("intTag3", "3") could result with intTag3 having the incorrect value of 12345. This issue has now been corrected.

# Originally resolved in Service Pack 1

These fixes are included in Service Pack 3.

Issue Number	Issue Title and Description	
41702	Switching pages causes blank alarm page	e or banner
	Sometimes when switching between pages of This has now been fixed.	or other operations, the alarm page or banner will go blank.
41805	Systems with multiple IOServers and mar	y units experience high CPU usage
	are not defined on all IOServers, the IOServe	ultiple IOServers, and where there are tags in a cluster that er processes may display unusually high CPU usage. This e tags not defined on that server, resulting in unnecessary has now been fixed.
41851	Unreliable or high-latency networks may	result in high CPU for Tran.Task.Delay
		high latency may experience an issue where server Fran. Task. Delay task. This is because connection attempts d up. This issue has now been fixed.
41879	Cannot run more than one I/O server from	a cluster on a single machine.
		run more than one I/O server from a cluster on a single of the I/O server processes is a significant limiting factor so
41889	Incorrectly displayed font size and embos	sed style
	when upgraded to version 7.10. This problem need to be restored from the pre-Version 7.1	nt or text with the embossed style is not correctly converted in has been fixed. Please note that projects with this problem 0 version of the project files. This is because the problem during the upgrade process; therefore, requiring the .ctg files
41893	Compiler doesn't resolve tag name in IFD specified	EF() macro if full tag name (with Cluster prefix) is
	Using the IFDEF macro with a fully qualified இ <b>பிர்(அவச Na</b> sale <b>ph</b> has <b>D</b> ifrocesd fas now beer	tag name did not work, because the cluster was stripped has lem so

### 41977 IO Redundancy doesn't fail over until the primary server is completely shutdown

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.

### 42003 Enhancement to sort alarms by "Type" via the Cicode function AlarmSetInfo

This enhancement allows a user to sort alarms by "Type". Currently users can sort alarms via Cicode funtion AlarmSetInfo by "Tag", "Name", "Category", Priority, "Area", "Priv", "Time", "State", and Cluster and . "Type" sorting orders an alarm into four different categories which are unack, ack, cleared and disabled.

### 42063 AlarmSumSplit does not allow control over the timestamp or redundancy

AlarmSumSplit now has the following signature: INT AlarmSumSplit (INT Index [,STRING ClusterName=""] [,LONG onTime = 0] [,LONG onMilli = 0] [,INT bRedundant = FALSE] ) By default, when none of optional parameters are provided, the behaviour of this function is unchanged - it creates a new event based on existing event with given index, setting on Time and AckTime of newEvent to current time. OffTime of original alarms is set to onTime of newly created alarm. If original event's OffTime is already set (not zero), no split is performed. When using AlarmSumSplit in a new way, onTime and onMilli must be provided - they are used to set OnTime and OnMilli of newly created event. Before event is split, function performs search for existing event with time equal to time and milliseconds provided. If such event already exists, a condition known as time conflict occurs and no split is performed. -1 is then returned to cicode and user error CT ERROR ALARM TIME CONFLICT (0x204) = 516 is set. User code must then check error code by calling IsError(). This condition indicates that user code can retry operation by providing altered timestamp (in most cases, increasing milliseconds value by 1 will be sufficient) AlarmSumSplit call now can be redundant. If bRedundant flag is set to true, server will first try to split event locally and if it succeeds, message is forwarded to redundant server, which then splits corresponding event if it exists on it. Note - it primary server could not split the event, redundant server will not be informed, i.e. it won't even try to split event too. Redundancy is off by default.

# 42137 Active Alarm list stops updating when scrolling through alarm pages

An internal buffer overrun was causing a corruption resulting in the active alarm list becoming corrupted. This problem has been fixed.

### 42138 An "avalanche" of alarms may result in a crash

When many alarms are triggered at once (an "avalanche") there is a race condition potentially leading to a crash. This has now been fixed.

## 42139 Crash when number of alarms being processed exceeds [Alarm]CacheLength

A crash may occur when the number of alarm records being processed exceeds the alarm cache size ([Alarm]CacheLength), due to the most recently used cache record being reused. This has now been fixed.

#### 42140 A crash occurs processing Alarm event data

Some display clients may crash when retrieving event data from Alarm server, due to an internal race condition. This has now been fixed.

#### 42142 Using AlarmSumSplit may cause missing event sequences

Every time AlarmSumSplit created a new event, it was always setting that new event as current event. This had side effects when the event being split was a completed event (which already has OffTime set) from the past but there was a newer incomplete event. This leads to noticeable side effects on alarm summary page where events with certain timestamps may appear to be missing.

### 42392 Tracelog.dat may grow as large as 8GB, eventually leading to a crash

The default behavior for logging in v7.0 allowed the tracelog dat file to grow without bound, eventually

	leading to a crash. This was fixed by changing the default behavior to cap file size at 2MB. This can be overridden using the citect32.exe.config file.
42397	[Code]WriteLocal=0 does not work for page or user subscriptions
	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.
42442	Implicit type conversion in cicode not workin1 17.28 h(not)13( )14(w)-4(o(i)-9(c)4(ode)2V7)4(.)-9(c0

	with the duration of high CPU greatly reduced and startup times improved.
42510	Cicode function StrToLines() with maxchars "1" does not return anything
	StrToLines("AA BB CC",1,nLines) would return no lines when it should return six lines
42513	TrnPrint() cicode function doesn't display comment in v7.0
	The function _FindCommentFromPen(), used by TrnPrint(), failed to account for the possibility of cluster-specific pen names e.g. cluster.pen. This has now been fixed.
42516	Tag Import is failing for OPC Tags
	In Citect Explorer, dynamically importing OPC tags from an OPC Server fails. This has now been fixed.
42518	Crash at shutdown when using Cicode page handles
	User cicode functions that use window handles were not correctly handling shutdown situations, resulting in a crash at shutdown. This has now been fixed.
42519	Crash while calling Cicode function "WinFree" in background Cicode.
	The state of the s
	This problem can arise when calling WinFree in background Cicode such as during the page event "while page shown". The issue has been resolved.
42522	This problem can arise when calling WinFree in background Cicode such as during the page event "while
	This problem can arise when calling WinFree in background Cicode such as during the page event "while page shown". The issue has been resolved.
	This problem can arise when calling WinFree in background Cicode such as during the page event "while page shown". The issue has been resolved.  Alarm updates not sent to redundant server when [ALARM]SaveStyle=4 set  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
42522	This problem can arise when calling WinFree in background Cicode such as during the page event "while page shown". The issue has been resolved.  Alarm updates not sent to redundant server when [ALARM]SaveStyle=4 set  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.
42522	This problem can arise when calling WinFree in background Cicode such as during the page event "while page shown". The issue has been resolved.  Alarm updates not sent to redundant server when [ALARM]SaveStyle=4 set  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.  Display clients crash intermittently when using Color thresholds in rectangle fill.

	fixed.
42532	AlarmACK function does not support alarm categories larger than 255
	A logic error was introduced when refactoring the functions that handle alarm messages based on category. This problem has now been resolved.
42533	Multiple tag subscription callbacks result in "Out of Cicode threads" error.
	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. This has been fixed by introducing a queuing 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.
42536	'Startup Page' and 'Project List' dropdown lists in the Computer Setup Wizard are not sorted.
	The CBS_SORT style was added to the 'Startup Page' and 'Project Lists' dropdowns. This enhancement has been made. Where included in service packs, it will only be installed on English installations of Citect.
42540	Trend name not logged when using [Trend]TrendDebug
	The trend name is not reported when [Trend]TrendDebug is enabled. Specifically in cicode functions "TrnSetTable" and "TrnEventSetTableMS". This has now been resolved.
42541	CSV_Math_RoundDown() and CSV_Math_Truncate() round up for number with decimal > 0.5
	CSV_Math_RoundDown() and CSV_Math_Truncate()have been fixed so that they always round down.
42543	Pasting text from a closed Rich Text windows crashes Citect
	Pasting text from a closed Rich Text windows no longer crashes Citect
42547	Dynamically setting the Cluster argument for the AlarmDsp function does not work
	The logic to handle dynamic cluster changes in AlarmDsp only handled transitions from single-to-multi cluster and multi-to-single cluster but not single-to-single. This resulted in alarms not being correctly filtered on screen. This has now been fixed.
42548	On page exit command Cicode does not execute as expected
	Cicode that is configured to run when a page exits via the "on page exit command" field may not be executed as expected. This issue has now been resolved.
42550	Caching of data for scheduled devices does not work correctly if the Citect application directory path contains a full-stop character.
	This problem has been resolved - the Citect application directory path can now contain a full-stop (".") character.
42670	Display Clients will not switch to Standby Server if licence is removed from Primary Server
	The Sentinel licensing routines display Dialog boxes which are run on the main thread of the various servers, thus they block (stall) waiting for a user to dismiss them. The [Debug]SysErrDsp CITECT.INI setting now also gates the display of the various Dialog boxes produced by the Sentinel licensing routines. When set to zero, [Debug]SysErrDsp prevents the display of these Dialog boxes.
42958	Writes for a StandbyWrite IO Device may be sent to the wrong IO Device
	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.

### 43098 Tag subscription callbacks passed negative handle when number of subscriptions exceeds 32768

An error in the implementation of HF710R140585 meant that customers using this HF to subscribe to more than 32768 tags would receive a negative handle passed to the callback function. This was only a problem for users of the abovementioned HF (or combo HF's including Bug 40585), and has now been fixed.

### 43214 Pulse() function broken in v7, it was possible for the tag not to be turned off

From v7, it was possible to leave a genie window having used the Pulse function, and for the  $0 \Rightarrow 1 \Rightarrow 0$  sequence not to occur. i.e. the tag was set but not reset. This would happen if the window was left before the 2 second period had expired. This bug has been fixed.

# When using scheduled IO, only one tag from the device is updated while all other tags keep showing #WAIT

In Citect SCADA V7, the driver DataBase() function for remote devices can be called before InitChannel() which results in several problems - one of which is blockMax is then zero which causes the reported problem. This problem has been resolved.

# 43234 Crash when importing tags from Matrikon OPC Server for Mark V and Mark VI

This crash was possible when importing tags from OPC Servers that only supported v2 or later of the OPC specification. This issue has now been resolved.