

Application Version Control

STANDARD IN VTSCADA DEVELOPMENT RUNTIME LICENSES

Rolling back helps you move forward with confidence.

It is increasingly impractical to shut down modern mission-critical SCADA systems for configuration. Developing on live systems has the added benefit of allowing you to work with real I/O. Application Version Control (AVC) provides the freedom to configure in real-time in a multi-developer environment knowing you can instantly roll back any change.

Easy-to-use features allow you to:

- See a full change history of the application
- Identify incremental changes made in each version
- Recover instantly from unexpected effects of configuration
- Merge changes in a multi-developer environment

Note: AVC tracks application configuration changes rather than VTScada product versions.

Workstation	Last Update	Current Version
LAPTOP4	Fri Jun 25, 2021	
LAPTOP5	Fri Jun 25, 2021	LAPTOP5-D12
REGH	Tue Jan 14, 2020	REGH-D14

Version	Time Applied	User	Comment
REGH-L14	Tue Jan 14, 2020 11:47:34.571	Logged Off	Edit Properties
REGH-D13	Tue Jan 14, 2020 11:46:23.208	Logged Off	Keyword TRAINING has been added.
REGH-D12	Tue Jan 14, 2020 11:45:11.211	Logged Off	Automated commit.
REGH-D11	Tue Jan 14, 2020 11:06:03.266	Logged Off	Tag modified: MyTag
REGH-D10	Tue Jan 14, 2020 10:59:01.559	Logged Off	Automated commit.
REGH-D9	Tue Jan 14, 2020 10:58:01.559	Logged Off	Tag modified: MyTag
REGH-D8	Tue Jan 14, 2020 10:57:01.559	Logged Off	Tag modified: MyTag
REGH-D7	Tue Jan 14, 2020 10:56:01.559	Logged Off	Tag modified: MyTag
REGH-D4	Tue Jan 14, 2020 10:53:06.415	Logged Off	Automated commit.

Change Records and the Version Log

The AVC Version Log (above) allows authorized users to oversee changes on all servers from any workstation running a VTScada Development Runtime license. The log also tracks the version running on each computer.

Deploy Changes Manually or Automatically

By default, configuration changes are automatically deployed to all networked servers. These changes can be applied to un-networked servers using VTScada ChangeSet files. This can easily be disabled so that changes are only applied locally until users choose to deploy them. A local (L) version is generated and displayed in the version log (e.g., WorkstationName-L9).

On deployment, users enter a comment (e.g., “Added station graphics”) and a Deployed Change Record is created.

Traceability

Each change record includes a version number, date/timestamp, the user who made the changes, the workstation used, and a comment. An administrator may drill down into the Version Log to see details of all incremental changes made in any version (Image 2). A color-coded legend identifies the ‘from’ and ‘to’ states of each change. If Automatically Deploy is ON, the ‘D’ versions include incremental changes. If it is OFF, the ‘L’ version includes these changes.

Switching Versions

Should deployed changes negatively affect the application, an administrator can undo them by selecting a previous version in the Log and switching to it. The selected version is duplicated and becomes the current version.

Version	Time Applied
SERVER1-D74	Mon May 30, 2019 19:44:56.895
SERVER1-D73	Mon May 30, 2019 19:44:56.874
SERVER2-D72	2
SERVER2-D71	2
SERVER1-D70	9
SERVER1-D69	5
SERVER1-D68	3
SERVER1-D67	4
SERVER1-D66	Tue Jan 12, 2019 14:65:04.726

Image 1 - Rolling back changes is as easy as a right-click.

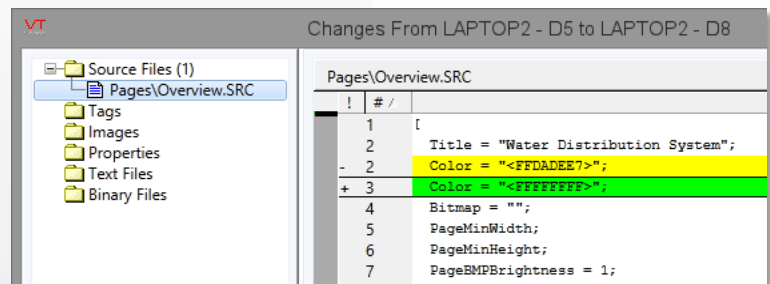


Image 2 - See color-coded incremental version changes.

Reverse Version Changes (Rollback)

Reversing a version change creates a new version of the application and removes all changes from a specific revision and avoids having to redo changes made after that revision.

Merge Version Changes

When rolling back to an earlier version, later changes can be re-introduced by merging versions. For example, if you have switched from version 10 to 5, you may select specific changes from version 7 and merge them back into the application.

Distributed Version Control

VTScada uses Distributed (not central) Version Control. Changes can be made, viewed and undone anywhere, regardless of whether you're connected to the network or even on a plane.

Built-in Beats Bolt-on

AVC is a core VTScada feature ensuring airtight integration over the life of your system. Configuration changes affecting multiple files are done atomically, guaranteeing consistency in every revision.

Flexible Licensing

VTScada applications automatically include change history. Access to the version log is standard with Development Runtime licenses and optional for Runtime licenses. If you don't enable AVC on your Runtime, your integrator can access your change history if they have a System Integrator license.

TRY IT FOR YOURSELF

Download the 90-day Trial:
[VTScada.com/trial](https://www.trihedral.com/trial)

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