



Proudly Presented by  
**VTScada**<sup>®</sup>  
**Trihedral**  
A Delta Group Company

# VTScada as a Windows Service

Paul Dexter

VTScada Developer & Project Engineer

SCADA FEST  2025  ACCELERATE



# Interactive Application vs Service



VT VTScada Application Manager 12.1.63

- Source Debugger
- Trace Viewer
- Thin Client Monitor
- Test Framework
- Completed Tutorial

Serial Number 33 Tags Used 0  
SupportPlus Expires Feb 23, 2026 Memory Used 142 MB

Completed Tutorial

VTScada Page Menu 12:28 AM Mar 20 Sign in

Recent Pages

- Alarms, Reports & Diagnostics
- Remote Sites
- Sample Pages
- Overview
- Zone 1 Control



**VTScada**  
Software for Monitoring & Control

Client Connection Options

- VTScada Internet Client for Windows  
[Open VTScada Internet Client](#) Show/Display/VC
- Or  
[Download VTScada Internet Client](#) Show/Download/StandAlone
- Anywhere Internet Client (HTML5)  
[Display Anywhere Client in your Browser](#) Show/Display/Anywhere
- Mobile Internet Client (HTML5)  
[Display Mobile Client in your Browser](#) Show/Display/Mobile

For more information visit [www.vtscada.com](http://www.vtscada.com)

**Trihedral**

Services

File Action View Help

Services (Local)

**VTScada Service**

[Start](#) the service

Description:  
VTScada instance which executes in Windows Service mode

| Name                      |
|---------------------------|
| VTScada Service           |
| WaaSMedicSvc              |
| WalletService             |
| Warp JIT Service          |
| WatchGuard Authentication |
| WatchGuard CGNAT Control  |



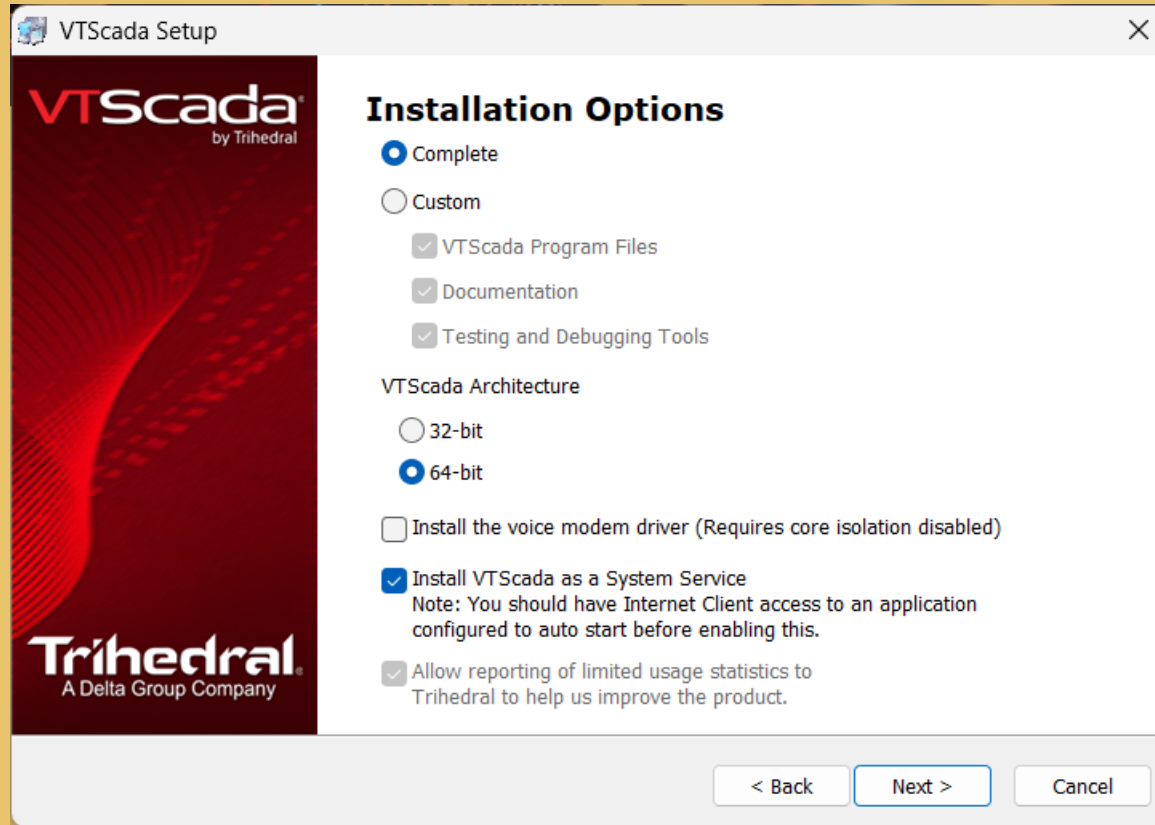
# Benefits of Running as a Service

- Start Automatically
- Remote Management
- Cloud / Virtualized Environment
- Security

But... No User Session



# Install as a System Service





# Set the Service Account

- Dedicated Account
- Read/Write Access to VTScada Installation Folder
- Allow COM operations for AD queries if using WSI
- Member of Performance Monitor Users group for Workstation Status Driver
- Special DCOM permissions for OPC Classic are set by the installer

A screenshot of the 'VTScada Setup' dialog box. The title bar reads 'VTScada Setup'. The main content area has a dark red background on the left with the 'VTScada by Trihedral' logo and 'Trihedral A Delta Group Company' at the bottom. The right side is white and contains the following text:

**VTScada Service Accounts**

You must configure a user account under which the VTScada service will run. The account must be configured with appropriate access rights. A regular user account that can run VTScada interactively is recommended.

Please provide the account name and password and click Verify Account to verify the account credentials. The account should either be a domain account in the form DOMAIN\accountname or a local account in the form .\accountname.

Service Account Name:

Service Password:

Account Verified

At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.



# Service Priority Levels

The screenshot shows the Windows Task Manager application. The 'Details' tab is active, displaying a list of running processes. The process 'VT VTS.exe' (PID 63464) is selected. A context menu is open over this process, showing options such as 'End task', 'End process tree', 'Provide feedback', 'Efficiency mode', 'Set priority', and 'Set affinity'. The 'Set priority' option is highlighted, and a sub-menu is open showing the following priority levels: Realtime, High, Above normal, Normal (selected), Below normal, and Low.

| Name                  | PID   | Status  | User name   | CPU | Memory (active) |
|-----------------------|-------|---------|-------------|-----|-----------------|
| VT VTS.exe            | 63464 | Running | naul dexter | 00  |                 |
| WavesAudioService.exe |       |         |             | 00  |                 |
| WavesSvc64.exe        |       |         |             | 00  |                 |
| WavesSysSvc64.exe     |       |         |             | 00  |                 |
| wgsslvpnsrc.exe       |       |         |             | 00  |                 |
| wgssoclient.exe       |       |         |             | 00  |                 |
| Widgets.exe           |       |         |             |     |                 |
| WidgetService.exe     |       |         |             |     |                 |
| wininit.exe           |       |         |             |     |                 |
| winlogon.exe          |       |         |             |     |                 |
| wlanext.exe           |       |         |             |     |                 |
| WmiApSrv.exe          |       |         |             |     |                 |
| WmiPrvSE.exe          |       |         |             |     |                 |



# Command Line Installation

|  |   |
|--|---|
| <code>vts.exe /s=install</code>                            | Install VTScada as a service using the Windows® operating system account, "Local System". Reinstalls if previously installed.<br><b>Caution:</b> Permitted, but strongly discouraged. |
| <code>vts.exe /s=install[NT AUTHORITY\LocalService]</code> | Install VTScada as a service using the Windows account, "Local Service". Reinstalls if previously installed.<br><b>Caution:</b> Permitted, but strongly discouraged.                  |
| <code>vts.exe /s=install[username] [password]</code>       | Install VTScada as a service using an account of your choice. Reinstalls if previously installed.   |
| <code>vts.exe</code>                                       | Run VTScada as an application. Fails if the service is not stopped.   |
| <code>vts.exe /s=start</code>                              | Run the VTScada service, installing it first if not present.  |
| <code>vts.exe /s=stop</code>                               | Stops the service if it is running but leaves it installed.   |
| <code>vts.exe /s=uninstall</code>                          | Uninstall the service. Will fail if the service is running.   |
| <code>vts.exe /s=disable</code>                            | Disable the VTScada service, this leaves the service installed but prevents it from starting.   |
| <code>vts.exe /s=enable</code>                             | Enable the VTScada service if it was previously disabled. This restores the ability to start the service.   |



# While We Can See

Before Starting the Service:

- Create / Add the Application
- Set to Auto Start
- Secure Application (Thin Client Access)
- Thin Client/Server Setup
- Install the VIC
- Configure VAM

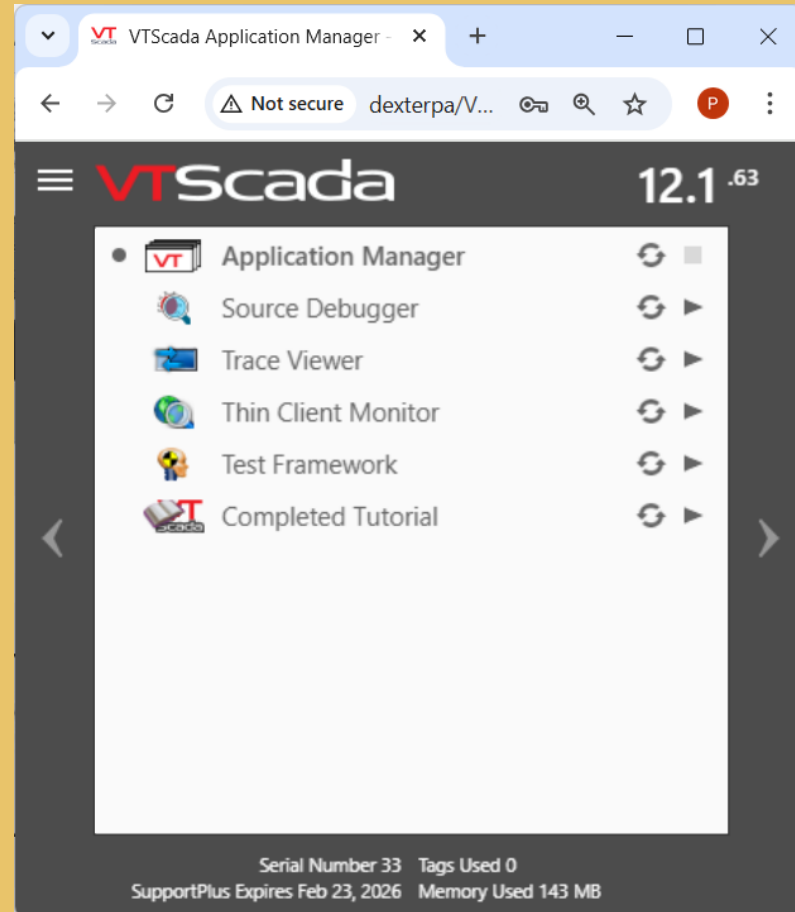
A screenshot of the SCADA FEST configuration interface, specifically the 'Realms' tab. The interface is divided into several sections. At the top, there are tabs for 'Realms', 'Server Setup', 'Connection Addresses', and 'Certificate'. The 'Realms' section contains an 'Authorization Realms' area with a 'Realm' dropdown menu set to 'App', and buttons for 'Add', 'Modify', and 'Remove'. Below this, the 'Protocol' is set to 'HTTP', 'Port' is '80', and 'Secure' is unchecked. The 'Applications Available On App' section has a list with 'Completed Tutorial' selected, and buttons for 'Add' and 'Remove'. Below the list are 'Move Selected' up and down arrows. The 'VIC URL' is 'http://DEXTERPA:80/App/Completed%20T...', 'MIC URL' is 'http://DEXTERPA:80/App/mobile', and 'Anywhere URL' is 'http://DEXTERPA:80/App/Completed%20T...', each with a 'Test' button. At the bottom, the 'HTTP Security' section has an unchecked checkbox for 'HTTP Strict Transport Security' and a 'Maximum HSTS Age' input field.



# VTScada Application Manager

## It's a Script Application

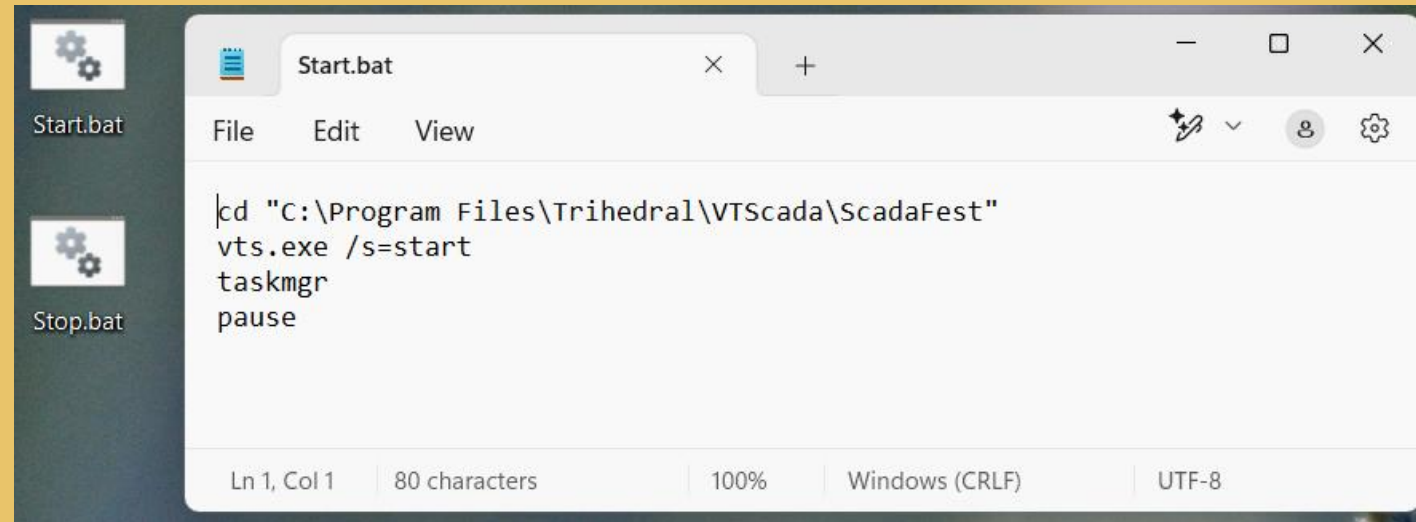
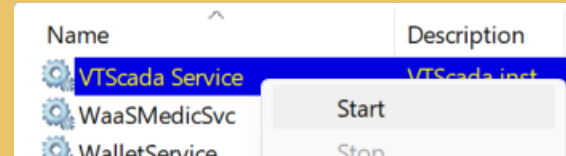
- Use Find Existing to add to the VAM
- Create a Realm
- Add Security
- One Instance at a Time





# Start and Stop the Service

- Task Manager
- Services Manager
- Command Line
- Remotely (Powershell, etc.)
- Batch Files





# Connect to your Application

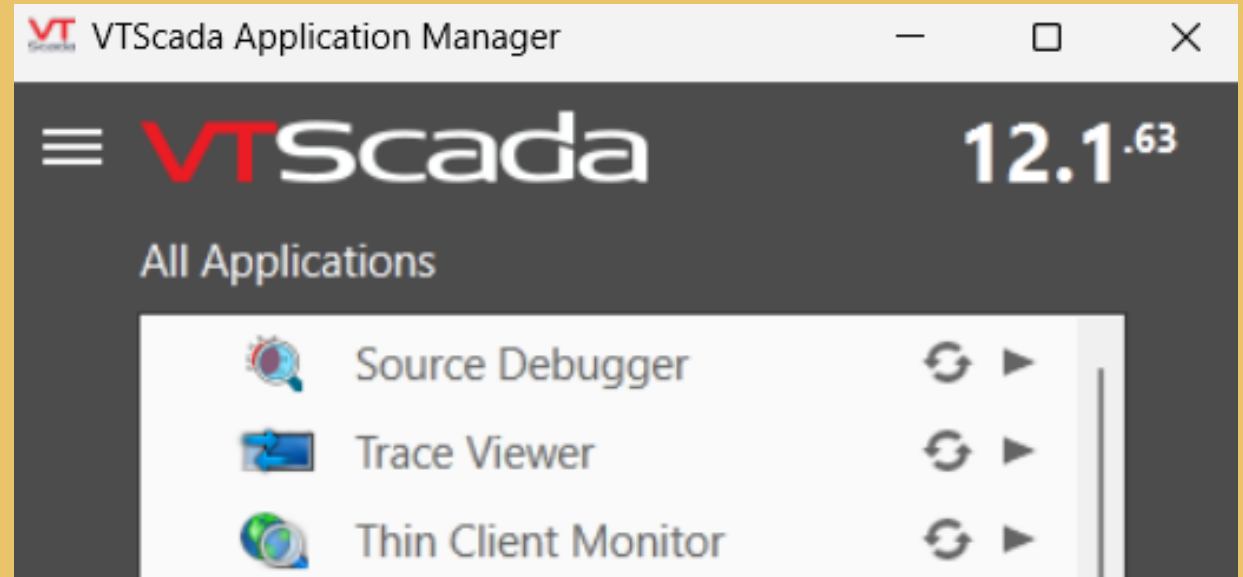
The screenshot displays the VTScada application interface. The main window, titled "VT APP - Completed Tutorial - DEXTERPA", features a dark theme with a navigation bar at the top containing the "VTScada" logo, a "Page Menu", and system icons. Below the navigation bar is a "Recent Pages" section with a thumbnail for "Overview". The main workspace is divided into several panels: "Alarms, Reports & Diagnostics" (a yellow folder icon with a magnifying glass), "Overview" (a process flow diagram), and "Zone 1 Control" (a map). An "VTScada Application Manager - DEXTERPA" window is overlaid on the right, showing a list of application components: Application Manager, Source Debugger, Trace Viewer, Thin Client Monitor, Test Framework, and Completed Tutorial. The "Completed Tutorial" component is selected and highlighted. At the bottom of the application manager window, system information is displayed: "Serial Number 33 Tags Used 34 SupportPlus Expires Feb 23, 2026 Memory Used 525 MB".



# Diagnostic Applications

- Source Debugger
- Trace Viewer
- Thin Client Monitor

Add them before you need them!

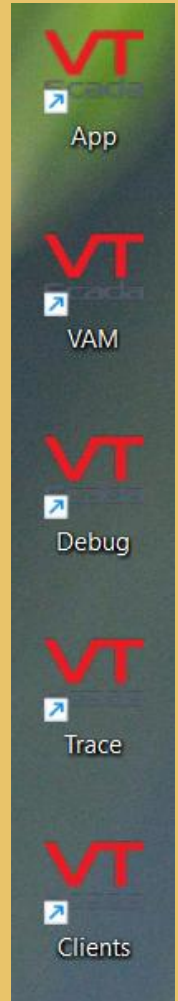
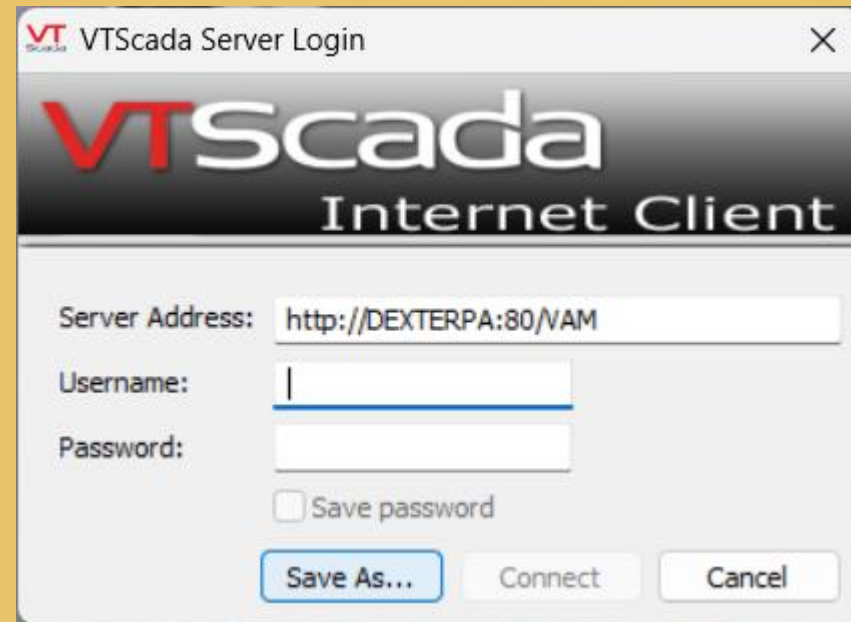




# Desktop Shortcuts

Add VIC shortcuts for:

- Application(s)
- Application Manager
- Source Debugger
- Trace Viewer
- Thin Client Monitor

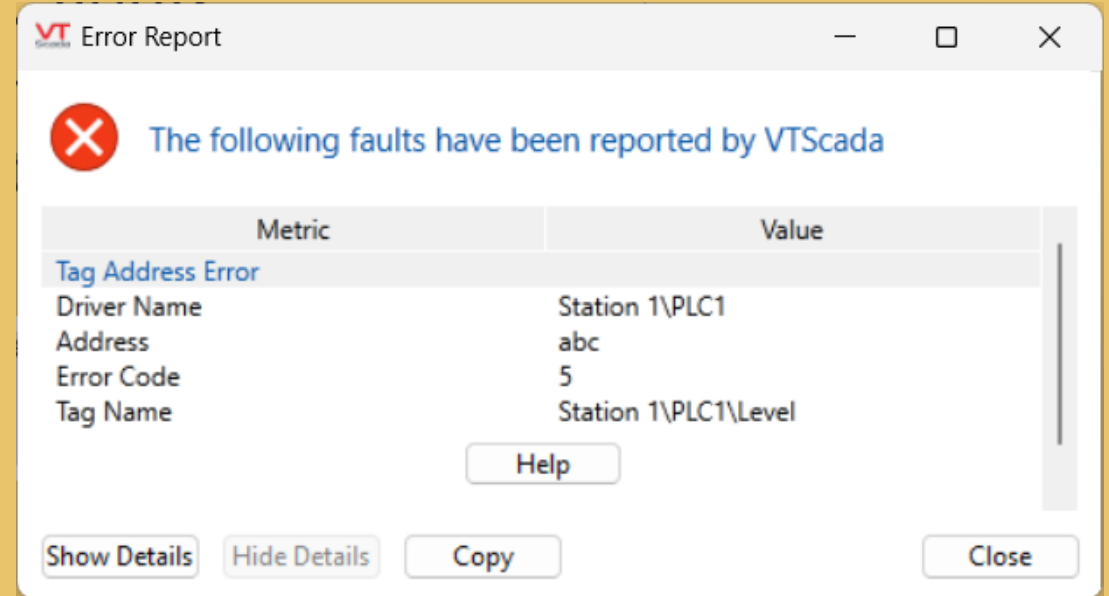




# Error Dialogs

- Usually Displayed on Server
- Windows Event Log
- Pass to Thin Clients
  - Longest Running
  - Defined List

```
[Default-User-Sessions]
Joe
Bob
Mary
```





# Limitations

- SAPI (Windows Text to Speech Engine)
  - Needed for Voice Modems
  - Sometimes needed for VOIP
  - Never needed for Twilio
- Excel COM output from Report Tags
- Switching between Interactive Application and Service
- File Permissions
- One Thin Client at a time for a script application



# Service Checklist

- Install with dedicated, non-administrator account
- Set Application for Auto-Start
- Set for Thin Client Access:
  - Application
  - Application Manager
  - Source Debugger
  - Trace Viewer
  - Thin Client Monitor



# Thank you for attending this session!

- Fill out the 2-question feedback survey via the App! *Ukova*
- Especially if you need a Continuing Education Credit or Professional Development Hours certificate.
- Don't have the app, fill out the paper form included in your conference kit and hand into Natashaia.

**SAVE THE DATE!**

MARCH 23-27, 2026 | ORLANDO, FLORIDA

SCADA FEST > 2025 < ACCELERATE