GETTING STARTED GUIDE

OptiZeus SCADA

Installation, First Steps & Basic Configuration

OptiZeus SCADA v2.5.4 · GS-OZ-001 · © 2026 Zeus Automation

optizeus.org · sales@optizeus.org · 3 pages

OVERVIEW

This guide walks you through installing OptiZeus SCADA, connecting your first PLC, creating tags, building your first HMI screen, and verifying live data. Follow the steps in order — you should have a live system running within 30 minutes.

MINIMUM SYSTEM REQUIREMENTS

OS (Server)	**Windows Server 2016+ or Ubuntu 20.04+**
CPU	**4-core x64 · 2.0 GHz minimum**
RAM	**8 GB (Windows) / 4 GB (Linux)**
Disk	**20 GB free + historian storage**
Browser	**Chrome 90+ / Edge 90+ / Firefox 88+**
Network	**100 Mbps to PLCs and HMI clients**
Database	**SQLite (dev) or SQL Server (production)**
Node.js	**v18+ (bundled in installer)**

INSTALLATION — WINDOWS

1. **Download Installer**
   Go to optizeus.org/download and download the Windows installer (.exe)
2. **Run as Administrator**
   Right-click installer → Run as Administrator. Accept UAC prompt.
3. **Choose Install Path**
   Default: C:\OptiZeus — or choose custom path. Click Install.
4. **Service Registration**
   Installer registers OptiZeus as a Windows Service (WinSW).
5. **Open Browser**
   Navigate to http://localhost:3000 — login screen should appear.

INSTALLATION — LINUX

```
# Download and extract
wget https://optizeus.org/download/optizeus-latest.tar.gz
tar -xzf optizeus-latest.tar.gz && cd optizeus

# Install dependencies & start service
sudo ./install.sh

# Enable on boot
sudo systemctl enable optizeus
sudo systemctl start optizeus
```

Default port is 3000. Access via http://your-server-ip:3000. For HTTPS production use, configure TLS certificate in settings.

FIRST LOGIN & INITIAL SETUP

Open Browser — STEP 1
Navigate to http://localhost:3000

Login — STEP 2
Default admin login — change immediately

License Key — STEP 3
Enter your license key in Settings → License

Set Database — STEP 4
Settings → Database → choose SQL Server for production

CONNECT YOUR FIRST PLC (OPC UA)

1 Go to Connections
Menu → Drivers → OPC UA → Add New Connection

2 Enter Endpoint URL
Format: opc.tcp://192.168.1.10:4840

3 Security Mode
Select None (dev) or Sign&Encrypt; (production)

4 Test Connection
Click Test — green = connected, red = check IP/firewall

5 Browse Nodes
Click Browse to see all PLC variables

6 Save & Activate
Click Save — connection goes live immediately

SUPPORTED PLC CONNECTIONS

Siemens S7-1200/1500	**OPC UA built-in or S7 driver**
Siemens S7-300/400	**S7 ISO-TCP driver (port 102)**
Allen-Bradley	**EtherNet/IP · PCCC (MicroLogix)**
Zeus IPC-CM400200	**CODESYS OPC UA Server (recommended)**
Schneider / Modicon	**Modbus TCP · port 502**
Generic Modbus	**Modbus TCP or RTU over RS-485**
Any OPC UA Device	**OPC UA Client — universal connectivity**
IoT / Edge Devices	**MQTT broker connection**

CREATING YOUR FIRST TAGS

1 Open Tag Manager
Menu → Tags → Tag Manager → Add Tag

2 Tag Name
Enter a name: e.g. Reactor_Temp_PV

3 Data Type
Select: Float32, Bool, Int32, String...

4 Data Source
Choose driver + browse to OPC UA node ID

5 Scan Rate
Set scan rate in ms (default 1000ms = 1s)

6 Engineering Units
Set EU: °C, bar, L/h, etc. + min/max range

7 Alarm Limits
Set HH/H/L/LL thresholds if required

8 Save Tag
Click Save — tag is live immediately

AI TAG CREATION (SHORTCUT)

Instead of creating tags one by one, use the built-in AI assistant:

```
# Tell the AI what you need:
"Create 20 tags from this Siemens S7
 PLC address list: DB1.DBD0 = Flow_PV,
 DB1.DBD4 = Temp_PV, DB1.DBX8.0 = Pump_Run..."

# AI creates all tags in seconds
# including data types, scaling, alarms
```

BUILDING YOUR FIRST HMI SCREEN

1. **New Screen**
   Menu → Screens → Add Screen → enter name
2. **Add SVG Component**
   Drag pump/tank/valve from left panel onto canvas
3. **Bind Tag to Component**
   Click component → Properties → Tag → select your tag
4. **Set Color Animation**
   Add color rule: value > 80 → Red, else Green
5. **Add Value Display**
   Drag Text widget → bind tag → set format: #.## °C
6. **Add Trend Chart**
   Drag Trend widget → select tags → set time range
7. **Save & Preview**
   Click Save → Preview to see live data on screen

CONFIGURE ALARM NOTIFICATIONS

Email	**Settings → Notifications → SMTP → test s**
WhatsApp	**Settings → Notifications → WhatsApp → e**
SMS	**Settings → Notifications → GSM Modem → port + baud**
Telegram	**Settings → Notifications → Telegram → Bot token + chat ID**
User Groups	**Assign users to alarm groups with weekly schedule**

VERIFY YOUR INSTALLATION

- [ ] Server running — accessible at http://server:3000
- [ ] License activated — correct tier shown in Settings
- [ ] PLC connected — green status in Drivers page
- [ ] Tags live — values updating in Tag Manager
- [ ] HMI screen showing live data
- [ ] Historian logging — check Trend Viewer for history
- [ ] Alarm configured — test trigger and notification
- [ ] User accounts created — default password changed
- [ ] Database backup scheduled
- [ ] HTTPS certificate configured (production)

NEXT STEPS

User Manual
Full feature reference — all modules

Protocol Guides
Deep-dive PLC connection guides

GAMP5 Validation
Run IQ/OQ/PQ for pharma compliance

API Reference
Integrate with external systems

Need help? Contact support: sales@optizeus.org · optizeus.org/docs
Community forum: optizeus.org/forum · zeus-automation.com