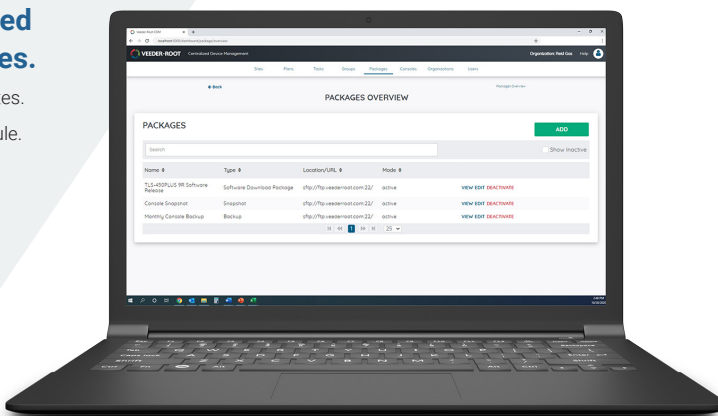


Centralized Device Management

Defend against catastrophic data loss and create a secure operating environment with the latest software upgrades for your automatic tank gauges.

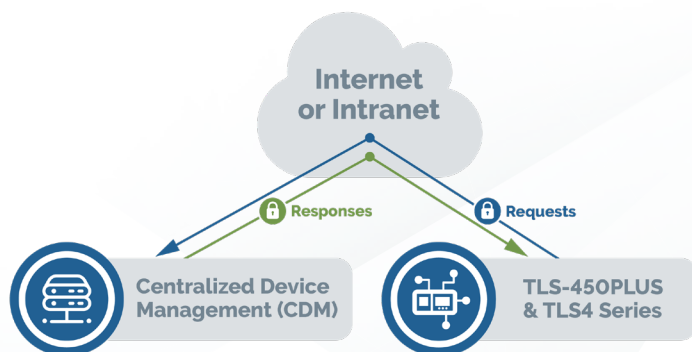
Centralized Device Management (CDM) is a server-based software package to manage your entire network of sites.

- Ensure your consoles are always up to date with the latest features and security updates.
- Perform software upgrades and backups across your console network on your schedule.
- Backup console data and settings to ensure important data is never lost.
- Capture console setup changes in CDM.
- Query a centralized database of changes, by Date/Time, Multiple Categories, Console ID, Username and Search for specific text strings.
- Capture lost console communications, failed CDM plans and CDM software restarts.
- Notify users hourly or daily via email of console changes and CDM specific events.



► SERVER-BASED ATG MANAGEMENT PLATFORM

Upgrades and backups are initialized from CDM and can be contained behind your network firewall for security.



A console connected to your CDM server will periodically reach out to check for available software packages and perform backups.

THE VALUE OF CDM

AUTOMATION

CDM can be completely or partially automated:

- Eliminate the time intensive process of updating and backing up consoles across an organization.
- Save money on on-site technician fees.
- In the event of new builds, Change Management can be disabled for specific consoles.

PEACE OF MIND

Never lose important console data:

- If your consoles are not backed up, you could lose all compliance data, which puts you at risk.
- If you do not have compliance data, you could be subject to fines.
- Receive notifications of console configuration changes.

► SOFTWARE UPGRADE

Keep better control of your network

- Automate remote software downloads and upgrades for your entire network.
- Set software to automatically download and activate, or manually download and activate at your convenience.
- Schedule upgrades around your specific needs.
- Group consoles by location, site type, time zone, etc.

► CONSOLE BACKUP

Protect your site data to ensure proper compliance

- Automatically backup TLS-450PLUS and TLS4 Series console data for any console in your network.
- Use the backup file to configure new build sites.

VIEW VAULT

VAULT

Name: SimGas Backup Amazon Vault

Location: https://s3.amazonaws.com/443/

Access Key ID: jsmith@simgas.com

Bucket: buckets/simgas-backups

Method: S3

Certificate: ---

Secret Access Key: ****

Region: eastern-us

EDIT

VIEW PACKAGE

PACKAGE

Name: Daily Backups to Amazon S3

Vault: SimGas Backup Amazon Vault

Directory: Console ID / Year

Type: Backup

URL: https://s3.amazonaws.com/443/

Mode: active

EDIT

VIEW PLAN**PLAN**

Plan Name: Daily Backup to Amazon S3

Start Date: 9/29/20, 12:00 AM

Active From: 12:00 AM

Schedule Type: Daily

Day Of Month:

of Consoles: 2

Status: Defined

Package: Daily Backups to Amazon S3

End Date: 12/31/20, 11:59 PM

Active Thru: 6:00 AM

Occurrence:

Week Day:

Mode: active

EDIT

Created By: jsmith at 9/29/20, 9:23 AM

Updated By: jsmith at 9/29/20, 9:23 AM

VIEW PACKAGE

PACKAGE

Name: Console Snapshot

Vault: SFTP - Veeder-Root

Directory: Snapshot

Notes:

Type: Snapshot

URL: sftp://ftp.veederroot.com:22/

Mode: active

EDIT

Updated By: tysonkreid at 10/14/20, 4:45 PM

Created By: tysonkreid at 10/14/20, 4:45 PM

► CONSOLE SNAPSHOT

Easily troubleshoot site issues

- A Console Snapshot captures the database and logs.
- Capture a Console Snapshot to provide useful information to Veeder-Root Technical Support.

► CHANGE MANAGEMENT

Capture console changes

- Events are changes in console configuration setup or they can be specific to CDM.
- Changes to console settings are captured in CDM as Events with more than 150 categories.
- CDM specific Events are captured, including CDM restarts, plan failures, and loss of console communications.
- Events can be queried by Date/Time, Multiple Categories, Console ID, Username and Search for specific text strings.
- The current and previous value of consoles changes can be seen.

EVENTS OVERVIEW

EVENTS

☒ (All)

Event Count: 187

Date / Time	Indicator	Category	Parameter	Device	Previous	Current	ID	Console Name
8/4/21 9:29 AM	CDM	CDM Server	CDM Started			20:18		
8/4/21 8:57 AM	CDM	CDM Server	Lost Communication				000001	Inyosm450Plus
8/3/21 5:48 PM		MAG Sensor	Configured	4	Enabled		000001	Inyosm450Plus
8/3/21 5:48 PM		MAG Sensor	Configured	5	Enabled		000001	Inyosm450Plus
8/3/21 5:48 PM		MAG Sensor	Configured	2	Enabled		000001	Inyosm450Plus
8/3/21 5:48 PM		MAG Sensor	Configured	1	Enabled		000001	Inyosm450Plus
8/3/21 5:48 PM		MAG Sensor	Label	4	MAG Sensor		000001	Inyosm450Plus

Category Selection

☒ CDM Server ☐ Security ☐ Access ☐ Alarm

☒ Probe ☐ Site Information ☒ Tank ☐ MAG Sensor

☐ Device Controller

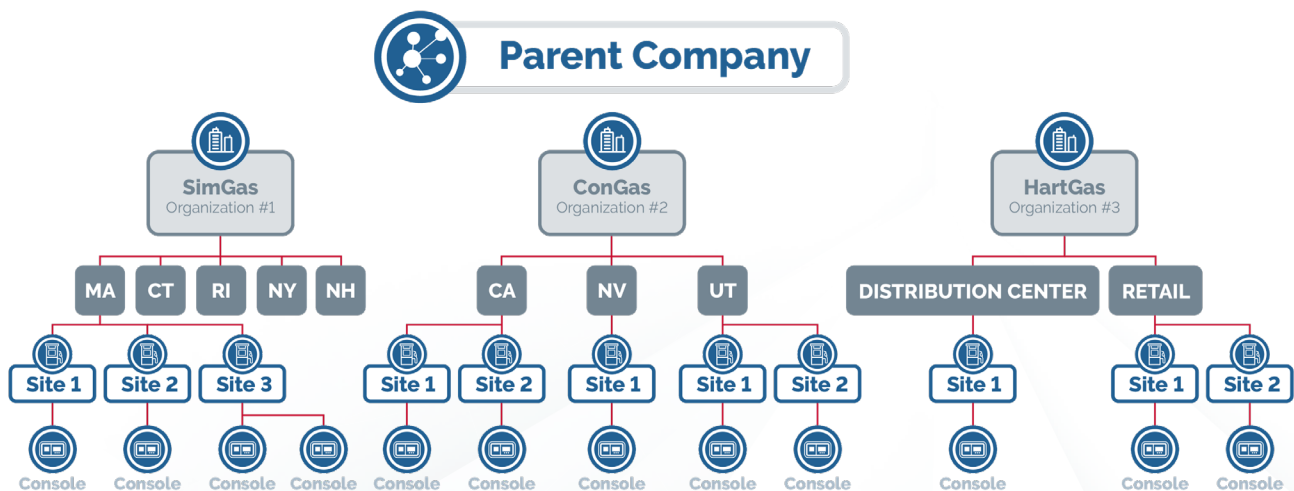
CANCEL **FILTER**

MANAGING YOUR DATA IN CDM

CDM allows you to manage your network through a flexible hierarchy to meet your business needs:

- **Organizations** – The top-level units that manage groups of sites.
- **Vaults** – Places to store files, including Software Upgrades, Console Backups and Console Snapshots.
- **Users** – Those allowed to access CDM. Users can have either an Admin role or a User role.
- **Sites** – Geographical locations where consoles are located (e.g., a station or building).
- **Consoles** – The TLS-450PLUS and/or TLS4 Series ATGs located at a site.
- **Groups** – A grouping of consoles.
- **Packages** – Things to be done (e.g., Software Upgrades, Console Backups and Console Snapshots).
- **Plans** – Plans are used to manage the actions done for a set of consoles.
- **Tasks** – Behind the scenes, tasks are used to manage work being done on consoles and to report the progress towards completion.
- **Events** – Console setup changes and CDM specific Events can be captured and reviewed through the Change Management feature.
- **Notifications** – Another component of Change Management is providing periodic email notifications to a CDM user when changes have been made to consoles, when communications are lost with consoles, when CDM is restarted, and when plans fail within CDM. Users can then go back to CDM to garner any details.

Here is an example of how you can organize your sites and consoles in CDM:

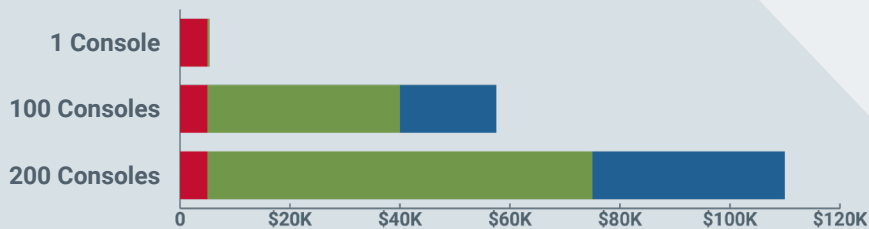


\$ COST SAVINGS ESTIMATOR

Cost to Recover Lost Data = \$5,000+

Cost to Upgrade a Console = \$350 per site visit

Cost for Return Site Visits = \$350 per site visit *



* Based on customer feedback that 50% of initial site visits result in at least one additional visit

The larger the network, the more savings can be realized with CDM. In addition to the direct costs, software updates with CDM can be done remotely in hours versus several weeks for a team of technicians to visit every site.

Additionally, knowing that a Service Contractor has incorrectly changed critical setting in the console can save on compliance charges, lost revenue and potentially improve operations.

SYSTEM REQUIREMENTS FOR CDM

Tested on PC-based systems: Windows 10 and Windows Server 2018

Software: CDM and a web server for filesharing

Four open ports: Here are examples of typical port configurations

- Port 3000 – CDM web access and console communication (Additional)
- Port 3001 – Console fileshare access (Additional)
- Port 53 – Communication from a console to a DNS server (Standard)
- Port 443 – Connection from web browser to a console (Standard)

A separate fileshare server to store updates (HTTP/HTTPS):

- Abyss is a free downloadable web server package
- Microsoft IIS
- Apache
- Other Windows based web servers

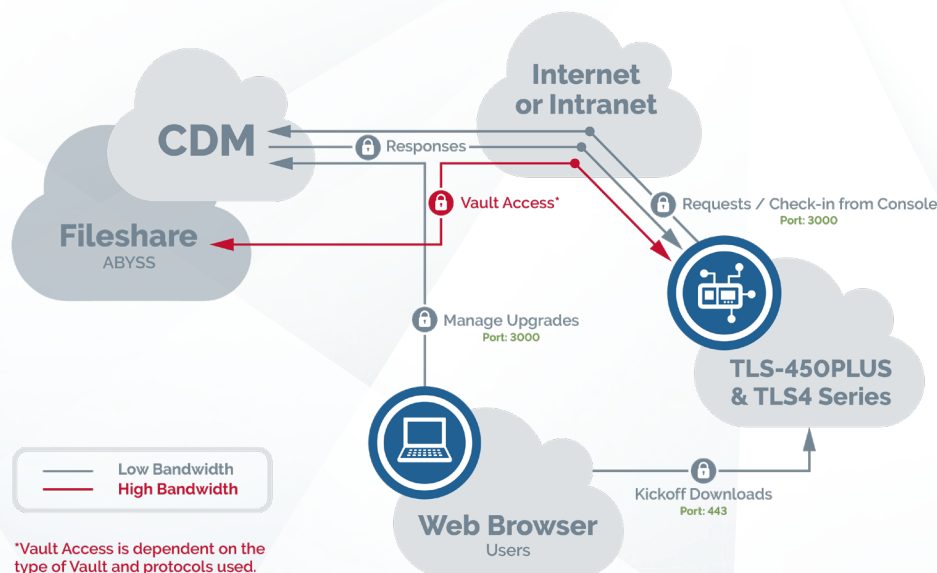
As CDM functionality grows, the console software needs to be upgraded to support CDM features as follows:

- Auto-Download and Auto-Activate require version 9.P or later
- Console Backup and Console Snapshot require version 9.R or later
- Change Management and Notifications require the console to be running with software version 10.B or later

► HOW CDM WORKS

The following diagram shows the interactions of the various components in the CDM environment. CDM is a server-based application designed to operate behind a customer's firewall. The operating environment consists of the CDM server, a fileshare system for storing upgrades and backups, and the TLS-450PLUS and TLS4 Series consoles. The fileshare system may already exist in the customer's IT environment or the free downloadable Abyss server may be used. Access to all the components is via a compatible browser.

Operationally, for security reasons, all activity is initiated from the consoles using periodic requests to the CDM server. In turn, CDM responds with a task to upgrade, backup, etc. The reply contains all the details the console requires to perform the task. In the case of an upgrade, the console pulls the upgrade from the fileshare and installs it.



► For more information on CDM, visit veeder.com/us/cdm