IntelliTeam FMS Server Overview

Enterprise Virtual Environment or Physical Appliance

This document provides information for customers deploying the IntelliTeam FMS Feeder Management System application as a virtual appliance in an existing enterprise virtual environment that is part of the customer Operations IT infrastructure.

If an existing enterprise virtual environment is not available, the other option is to purchase a physical appliance. Your S&C representative can provide details on the physical appliance and will work with you to determine the required specifications for the physical appliance.

FMS Server Functions

IntelliTeam FMS is delivered as an OVA file that is imported into an enterprise virtual environment. The FMS server runs on a Linux virtual guest machine and supports the functionality needed for the IntelliTeam FMS application, which includes the following:

- User and administrator browser sessions via HTTP(s)
- If available, IntelliTeam® Designer integration to import and configure devices
- Storage for system data, statistics, and measurements
- Communications with field devices using the DNP3 protocol
- Email (SMTP) to send reports and system-level call-home alerts

Bundled Third-Party Software

The following third-party software is included as part of the IntelliTeam FMS virtual appliance:

- **Oracle/Red Hat® Linux** – IntelliTeam FMS Linux operating system
- **Embedded Oracle Database** – 12c database
- **Embedded Oracle WebLogic** – 12c application server

Customer Provided Third-Party Software

Customers deploying to an enterprise virtual environment must provide and use the following third-party software to deploy and run the IntelliTeam FMS virtual appliance:

- **VMWare ESXi** – Versions >= 4.2 and < 6.5 are supported

Minimum VM Specifications

This information is for initial planning purposes only. S&C must review final hardware-purchase decisions for S&C software deployments to ensure the hardware is fully supported. When using VMWare solutions for high availability and/or fault tolerance, additional licenses may be required.

FMS VM Guest

- 4 CPU Cores
- 24-gigabyte (GB) RAM
- Minimum of 100-GB storage for up to 100 devices on SAN with capability to expand by 50 GB for every additional 100 devices (i.e., 300 devices = 200 GB) (Note that the IntelliTeam FMS virtual appliance supports resizing the disk without taking the application offline.)
- Minimum disk I/O at VM guest level—Should be able to sustain 80 MBs average disk reads

Typical IntelliTeam FMS Firewall

Figure 1 shows the communication paths and firewall requirements for a typical IntelliTeam FMS installation.
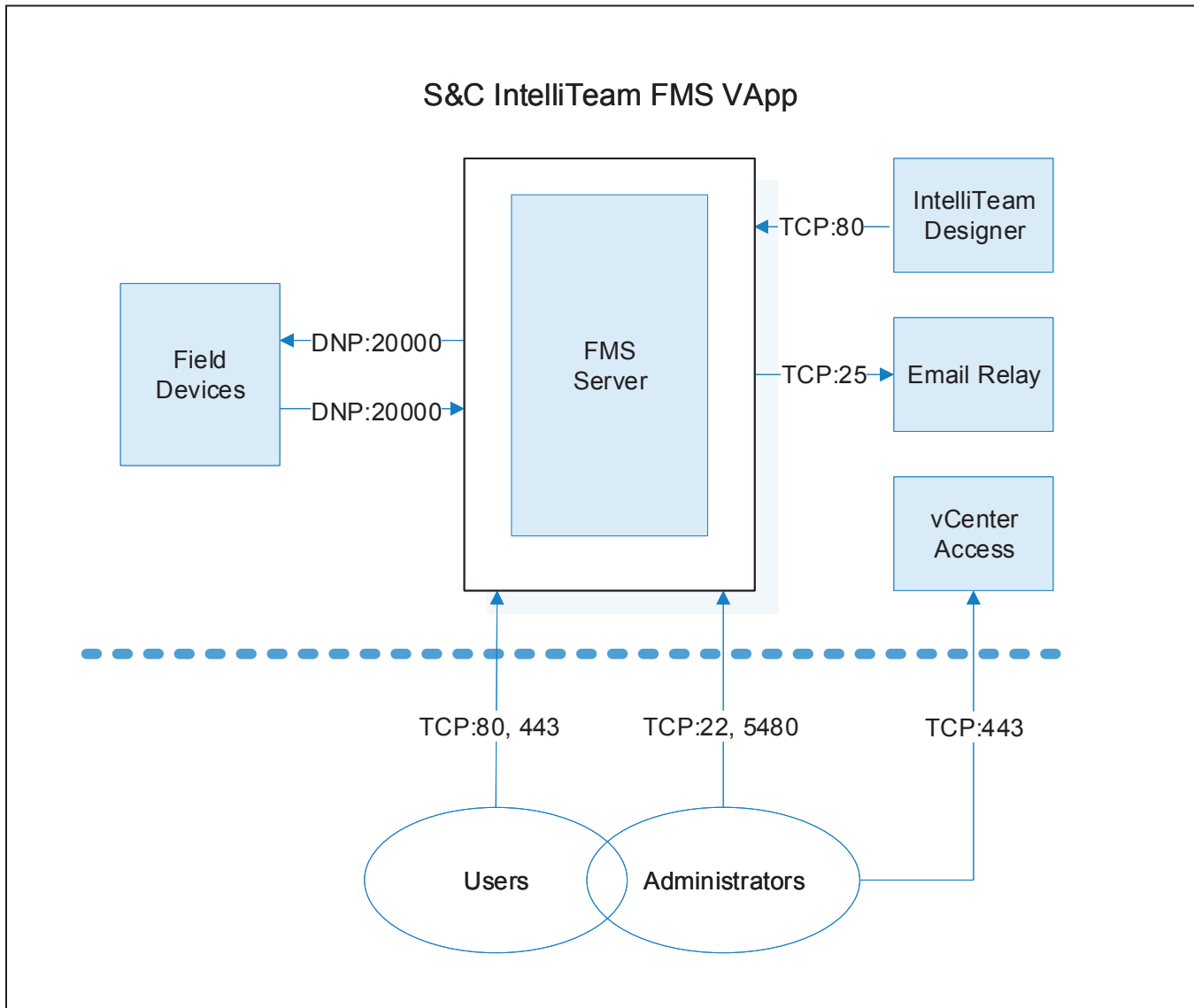

Figure 1. IntelliTeam FMS communication paths and firewall requirements.