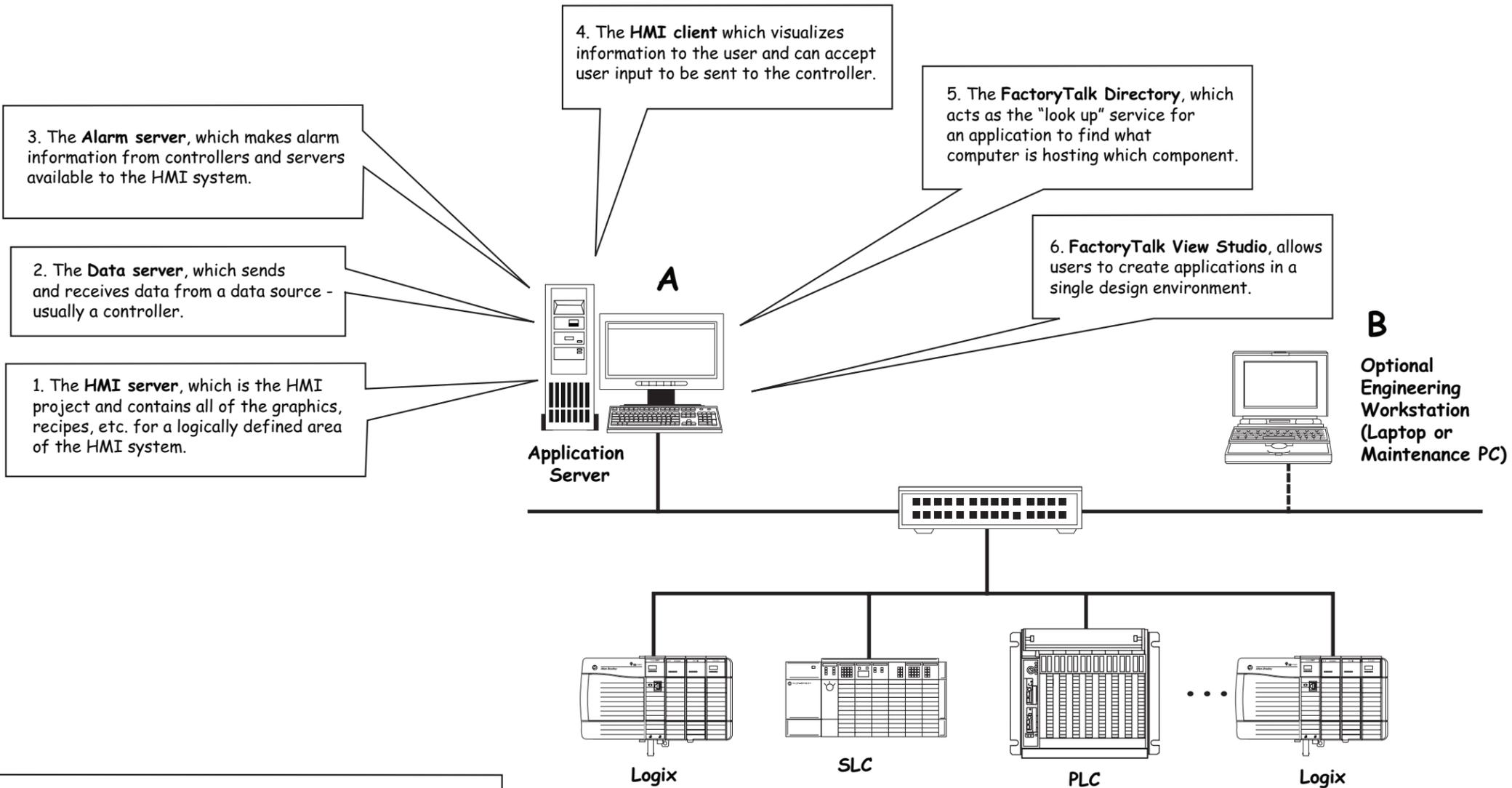


Every FactoryTalk View Site Edition system has 6 components.  
 In this example all 6 components are running on a single computer, computer A.



**FactoryTalk Site Edition (Local)**  
**Bill of Materials for Software Installation**

**Computer A - Application Server**  
 9701-VWSx FactoryTalk View Studio  
 9701-VWSy FactoryTalk View Site Edition with RSLinx Bundle  
 • Licensed by # of displays: 25, 100, 250, unlimited  
 • Includes RSLinx Enterprise  
 FactoryTalk Alarms and Events  
 Includes FactoryTalk Services Platform

**Computer B - Engineering Workstation**  
 9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
 9357-x RSNetWorx if needed  
 RS Linx Classic Installed

**Note: For FactoryTalk View Design Guidelines, please refer to KnowledgeBase ID 32549**

**Use this drawing when:**

- Remote connections are not required between client computers and server computers.
- An HMI application exceeds the FactoryTalk Machine Edition or PanelView Plus platform. For more information on FactoryTalk View Machine Edition applications, contact your local Rockwell Sales office.
- The application does not require any additional remote servers

**FactoryTalk View Studio Software: Configuration**

- **Create tags:** There can be direct reference tags from a data source like a controller, system tags, and HMI tags defined by the user.
- **Create displays.**
- **Configure alarming.**
- **Configure datalogging and/or trending.**
- **Create macros.**

**Optional - Computer B (Engineering Workstation): Configuration**

Typical software installed on Engineering Workstation:

- Controller programming software
- Network programming software
- Operating System:

**Computer A (Local): Configuration**

- FactoryTalk Directory
- HMI Server
- Data Server:
  - RSLinx Enterprise (Optional alarming)
- FactoryTalk View Studio
- Alarm Server
  - FactoryTalk Alarms and Events

**Computer B (Engineering Workstation): Capacity**

- Recommended processor speed is Intel Core 2 Duo and greater
- Recommended RAM is 4 GB or more (Refer to Installation Guide for more details)

**Computer A (Local): Capacity**

- Recommended processor speed: 2GHz ,Dual core processor or more .
- Recommended RAM is 2 GB or more (Refer to Installation Guide for more Specification)
- **HMI Server** - limit of 1 HMI server for FT View Station
- **HMI Server:** The total # of graphics is determined by licensed amount: 25, 100, 250, unlimited. Each HMI server requires a license.
- **Graphic:** There can be a max of 3000 tags or expressions on a graphic.
- **Alarming:** There can be a total of 10,000 alarms per Alarm server computer.
- **Data Server**
  - It is recommended that no more than 3 Data Servers be configured to connect to a single controller.

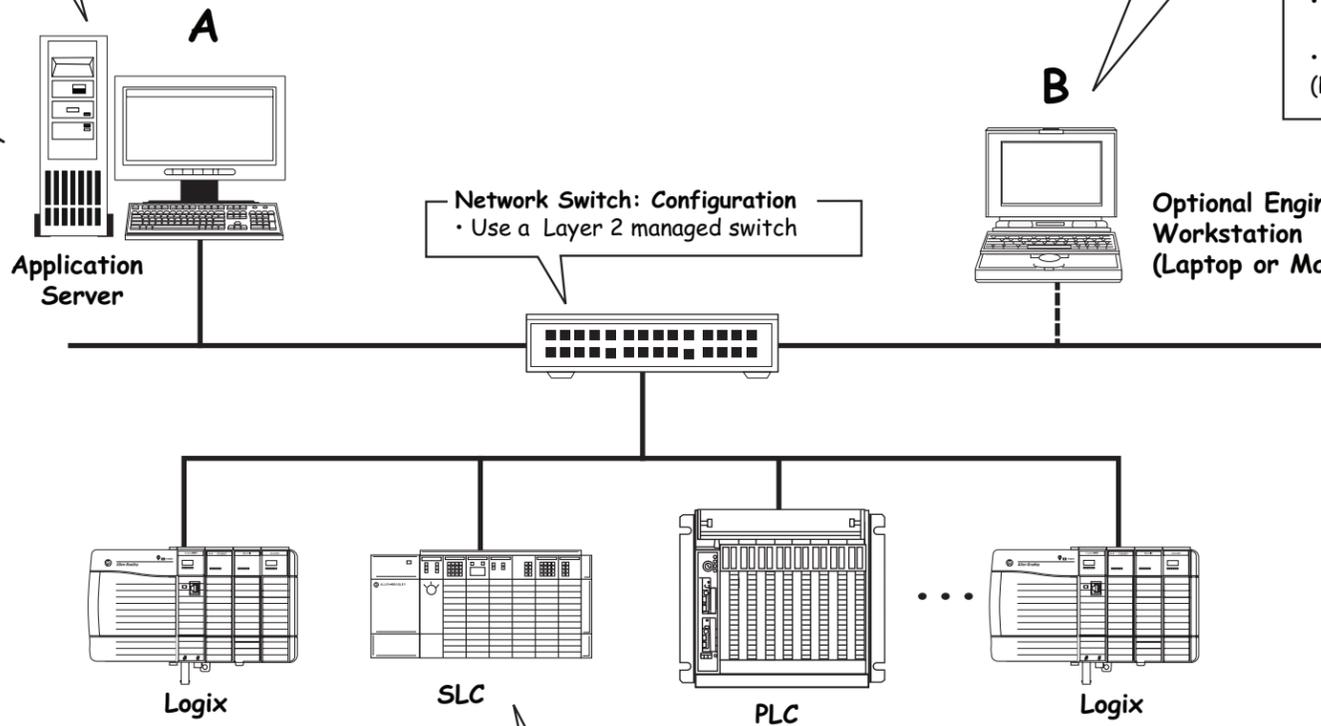
**Computer A (Local): Performance**

- Recommended steady-state CPU Utilization is 40%, as shown in Windows Task Manager, for all applications running, to allow for performance spikes

**Network Switch: Configuration**

- Use a Layer 2 managed switch

**Optional Engineering Workstation (Laptop or Maintenance PC)**



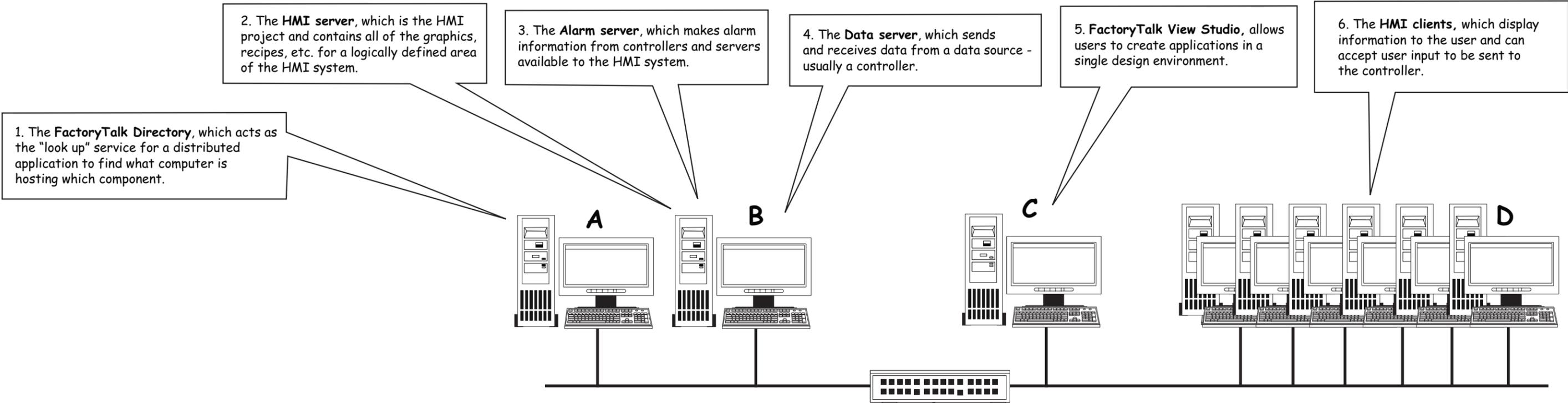
**Controller: Configuration**

- RSLinx Enterprise is the preferred data server for Rockwell Automation devices (ControlLogix, MicroLogix, SLC, PLC5, etc.)
- RSLinx Classic may be used as a data server if alias topics or complex paths are required.
- Use a 3rd party OPC server such as KepWare or Matrikon for communications with 3rd party devices.
- If 3rd party OPC clients are required, use FactoryTalk Gateway in conjunction with RSLinx Enterprise to provide OPC data.

**Controller: Capacity**

- Controller CPU and Memory are used to service communications, as well as program needs.
- Periodic task usage is recommended with scheduled breaks for communications.
- Use arrayed tags instead of scattered tags for optimized communications.
- \*\*See ControlLogix Design Considerations for detailed information.

Every FactoryTalk View Site Edition system has 6 components.



**FactoryTalk View Site Edition Network -  
Workgroup-Bill of Materials for Software Installation**

**Computer A - FactoryTalk Directory**  
Install FactoryTalk Services Platform, included with FactoryTalk View Studio

**Computer B - HMI Server**  
9701-VWSy FactoryTalk View Site Edition server  
• Licensed by # of displays: 25, 100, 250, unlimited  
Includes FactoryTalk Services Platform

**- Alarm & Data Server**  
RSLinx Enterprise  
FactoryTalk Alarms and Events  
Includes FactoryTalk Services Platform

**Computer C - Engineering Workstation**  
9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
9357-x RSNetWorx if needed  
RSLinx Classic Installed  
9701-VWSx FactoryTalk View Studio  
Includes FactoryTalk Services Platform

**Computer D - HMI Client**  
9701-VWSx FactoryTalk View Site Edition Client  
Includes FactoryTalk Services Platform

**Use this drawing when:**

- Remote connections exist between client computers and server computers.
- There are less than 10 FactoryTalk computers on the network. For 10 or more FactoryTalk computers, a domain is required. See Drawing **FactoryTalk View Site Edition (Network) - Domain**
- Centralized Windows security administration is not desired for the workgroup.

**Note: For FactoryTalk View Design Guidelines, please refer to KnowledgeBase ID 32549**

In this example of a distributed system in a workgroup configuration, there are 6 clients each on their own computer, and one engineering workstation. Server computer with an HMI server, Data server, and Alarm server. The FactoryTalk Directory is on its own computer. This is just an example, and other combinations of HMI servers, data server, alarm server, FactoryTalk Directory and HMI clients could be used.

Note: The HMI and Data servers can be running on separate computers.

## FactoryTalk View Site Edition Network Distributed - Workgroup Bill of Materials for Software Installation

### Computer A - FactoryTalk Directory

Install FactoryTalk Services Platform,  
included with FactoryTalk View Studio

### Computer B - HMI Server

9701-VWSy FactoryTalk View Site Edition sever  
• Licensed by # of displays: 25, 100, 250, unlimited

#### - Alarm Server & Data Server

RSLinux Enterprise  
FactoryTalk Alarms and Events  
Includes FactoryTalk Services Platform

### Computer C - Engineering Workstation

9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
9357-x RSNetWorx if needed  
RSLinux Classic Installed  
9701-VWSx FactoryTalk View Studio  
Includes FactoryTalk Services Platform

### Computer D - HMI Client

9701-VWSx FactoryTalk View Site Edition Client  
Includes FactoryTalk Services Platform

### Supported Limits (v7.0 and after):

10 HMI Servers per application (or 10 redundant HMI servers)  
10 Data Servers per application (or 10 redundant Data Servers)  
10 Alarm Servers per application  
50 Clients per application

### About this Configuration:

#### FactoryTalk View Site Edition (Network Distributed) - Workgroup

#### Use this option when:

1. Remote connections exist between client computers and server computers.  
For example, when a client or data server is located on another computer different from the HMI server computer.
2. And when there are less than 10 FactoryTalk computers in the network. For 10 or more FactoryTalk computers, a domain controller computer is required.  
See Drawing: FactoryTalk View Site Edition (Network) - Domain
3. Centralized Windows security administration is not desired.  
When desired please refer to Drawing: FactoryTalk View Site Edition (Network) - Domain

#### Every FactoryTalk View Site Edition system has 6 components:

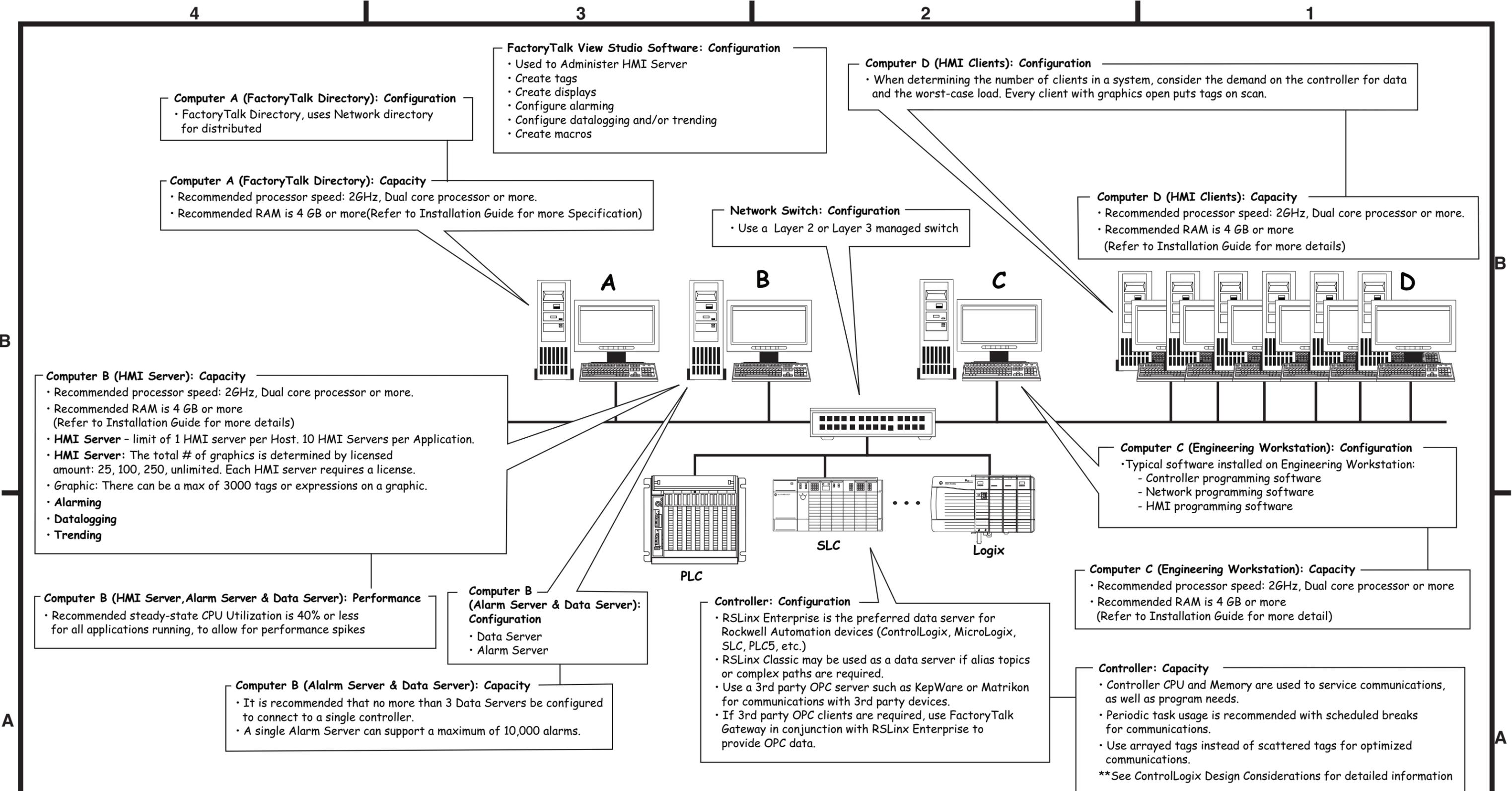
1. The **\*HMI server**, which is the HMI project and contains all of the graphics, recipes, etc., for a logically defined area of the HMI system.
2. The **\*Data server**, which sends and receives data from a data source - usually a controller.
3. The **\*Alarm server**, which makes alarm information from controllers and servers available to the HMI system.
4. The **HMI client or clients**, which display information to the user and can accept user input to be sent to the controller.
5. The **FactoryTalk Directory**, which acts as the "look up" service for a distributed application to find what computer is hosting which component.
6. **FactoryTalk View Studio**, allows users to create applications in a single design environment.

In a distributed system there are HMI servers, alarm servers or data servers on more than one computer, and HMI clients on one or more computers.

In this example of a distributed system in a workgroup configuration, there are a total of 9 computers: 1 FactoryTalk Directory Server, 1 HMI/Data/Alarm server, 6 clients, and 1 Engineering Workstation.

This is just an example, and other combinations of HMI servers, data servers, FactoryTalk Directory and HMI clients could be used.

\*These components can be made redundant. The primary and secondary HMI, Data, or Alarm Servers should be hosted on separate servers.



Note: Good up to 10 total computers

## FactoryTalk View Site Edition Network - Workgroup Bill of Materials for Software Installation

### Computer A - FactoryTalk Directory

Install FactoryTalk Services Platform,  
included with FactoryTalk View Studio

### Computer B - HMI Server

9701-VWSy FactoryTalk View Site Edition sever  
• Licensed by # of displays: 25, 100, 250, unlimited  
FactoryTalk Alarms and Events  
Includes FactoryTalk Services Platform  
Includes RSLinx Enterprise

### Computer C - Engineering Workstation

9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
9357-x RSNetWorx if needed  
RSLinx Classic Installed  
9701-VWSx FactoryTalk View Studio  
Includes FactoryTalk Services Platform

### Computer D - HMI Client

9701-VWSx FactoryTalk View Site Edition Client  
Includes FactoryTalk Services Platform

### Supported Limits (v7.0 and after):

10 HMI Servers per application  
10 Data Servers per application  
10 Alarm Servers per application  
50 Clients per application

## About this Configuration:

### FactoryTalk View Site Edition (Network) - Workgroup

#### Use this option when:

1. Remote connections exist between client computers and server computers.  
For example, when a client or data server is located on another computer different from the HMI server computer.
2. And when there are 10 or less computers in the network. For more than 10 computers, a domain controller computer is required. See Drawing: FactoryTalk View Site Edition (Network) - Domain
3. Centralized Windows security administration is not desired.  
When desired please refer to Drawing: FactoryTalk View Site Edition (Network) - Domain

#### Every FactoryTalk View Site Edition system has 6 components:

1. The **\*HMI server**, which is the HMI project and contains all of the graphics, recipes, etc., for a logically defined area of the HMI system.
2. The **\*Data server**, which sends and receives data from a data source - usually a controller.
3. The **\*Alarm server**, which makes alarm information from controllers and servers available to the HMI system.
4. The **HMI client or clients**, which display information to the user and can accept user input to be sent to the controller.
5. The **FactoryTalk Directory**, which acts as the "look up" service for a distributed application to find what computer is hosting which component.
6. **FactoryTalk View Studio**, allows users to create applications in a single design environment.

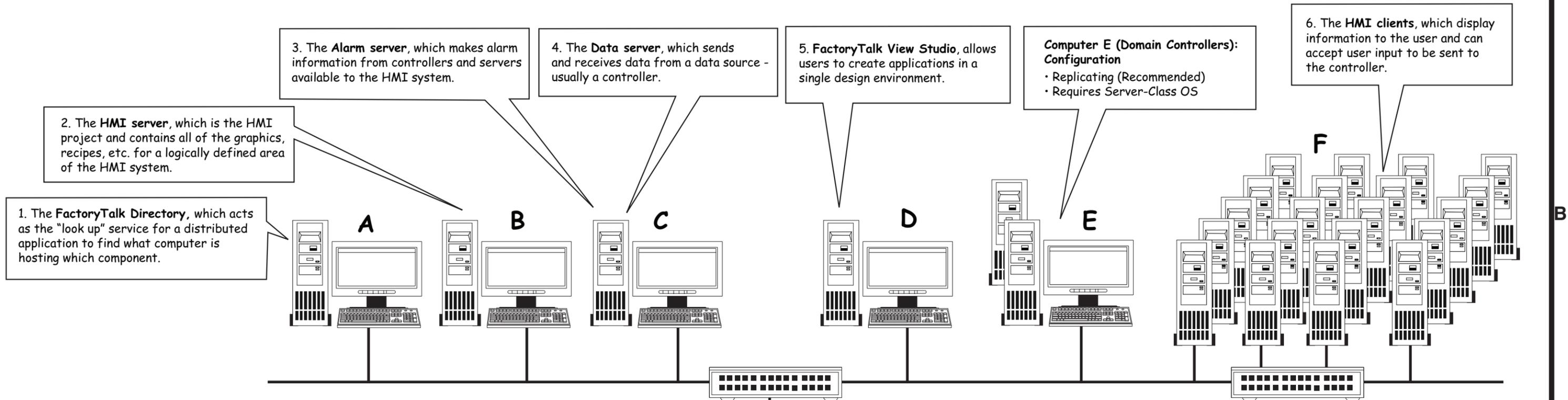
In a distributed system there are HMI servers, alarm servers and data servers on more than one computer, and HMI clients on one or more computers.

In this example of a distributed system in a workgroup configuration, there are a total of 9 computers: 1 FactoryTalk Directory Server, 1 HMI/Data/Alarm server, 6 clients, and 1 Engineering Workstation.

This is just an example, and other combinations of HMI servers, data servers, FactoryTalk Directory and HMI clients could be used.

\*These components can be made redundant. The primary and secondary HMI, Data, or Alarm Servers should be hosted on separate servers.

Every FactoryTalk View Site Edition system has 6 components.



**FactoryTalk View Site Edition Network - Domain Bill of Materials for Software Installation**

**Computer A - FactoryTalk Directory**  
Install FactoryTalk Services Platform, included with FactoryTalk View Studio

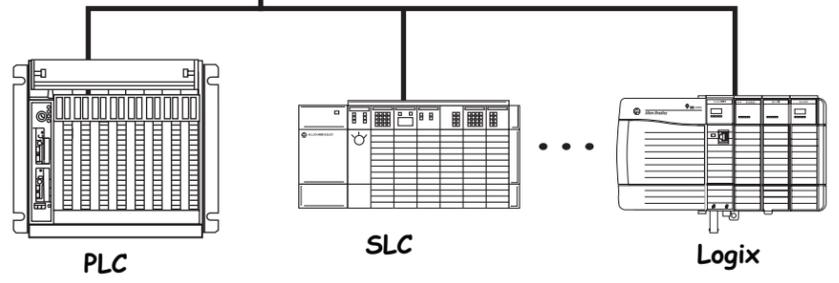
**Computer B - HMI Server**  
9701-VWSy FactoryTalk View Site Edition server  
• Licensed by # of displays: 25, 100, 250, unlimited  
Includes FactoryTalk Services Platform

**Computer C - Alarm Server & Data Server**  
RSLinx Enterprise  
FactoryTalk Alarms and Events  
Includes FactoryTalk Services Platform

**Computer D - Engineering Workstation**  
9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
9357-x RSNetWorx if needed  
RSLinx Classic Installed  
9701-VWSx FactoryTalk View Studio  
Includes FactoryTalk Services Platform

**Computer E - Domain Controller**  
There should not be any application software installed on the Domain Controller computer.

**Computer F - HMI Client**  
9701-VWSx FactoryTalk View Site Edition Client  
Includes FactoryTalk Services Platform



**Note: For FactoryTalk View Design Guidelines, please refer to KnowledgeBase ID 32549**

**Use this drawing when:**

- Remote connections are required between client computers and server computers.
- There are 10 or more FactoryTalk computers in the network.
- Centralized Windows security administration is desired for the system.

In this example of a distributed system in a domain configuration, there are 20 clients, each on their own computer, and one engineering workstation. There are two server computers, one for the HMI server, and one for the Data and Alarm servers. The FactoryTalk Directory is on its own computer. This is just an example, and other combinations of computers and software components could be used.

## FactoryTalk View Site Edition Network - Domain Bill of Materials for Software Installation

### Computer A - FactoryTalk Directory

Install FactoryTalk Services Platform,  
included with FactoryTalk View Studio

### Computer B - HMI Server

9701-VWSy FactoryTalk View Site Edition server  
• Licensed by # of displays: 25, 100, 250, unlimited

Includes FactoryTalk Services Platform

### Computer C - Alarm Server & Data Server

Includes RSLinx Enterprise  
FactoryTalk Alarms and Events  
Includes FactoryTalk Services Platform

### Computer D - Engineering Workstation

9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
9357-x RSNetWorx if needed

RSLinx Classic Installed  
9701-VWSx FactoryTalk View Studio  
Includes FactoryTalk Services Platform

### Computer E - Domain Controller

There should not be any application software installed on the  
Domain Controller computer.

### Computer F - HMI Client

9701-VWSx FactoryTalk View Site Edition Client  
Includes FactoryTalk Services Platform

### Supported Limits (v7.0 and after):

10 HMI Servers per application  
10 Data Servers per application  
10 Alarm Servers per application  
50 Clients per application

## About this Configuration:

### FactoryTalk View Site Edition (Network) - Domain

#### Use this option when:

1. Remote connections exist between client computers and server computers.  
For example, when a client or data server is located on another computer different from the HMI server computer.
2. There are more than 10 computers in the network.
3. Centralized Windows security administration is required.

#### Every FactoryTalk SE system has 6 components:

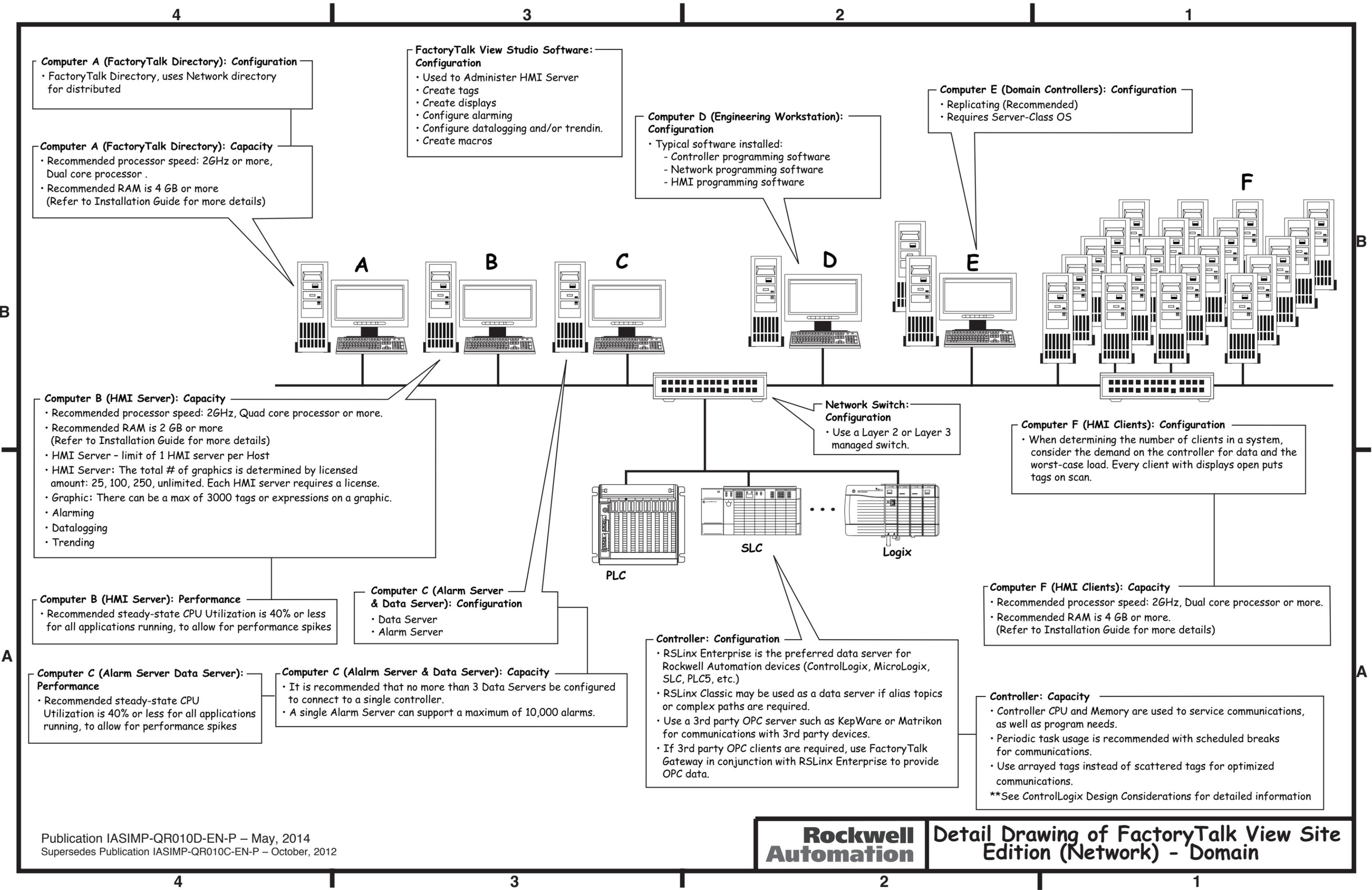
1. The **\*HMI server**, which is the HMI project and contains all of the graphics, tags, macros, etc. for a logically defined area of the HMI system.
2. The **\*Data server**, which sends and receives data from a data source - usually a controller.
3. The **\*Alarm server**, which makes alarm information from controllers and servers available to the HMI system.
3. The **HMI client or clients**, which display information to the user and can accept user input to be sent to the controller.
4. The **FactoryTalk Directory**, which acts as the "look up" service for a distributed application to find what computer is hosting which component.
5. **FactoryTalk View Studio**, allows users to create applications in a single design environment.

In a distributed system there are HMI servers, data servers and alarm servers, and HMI clients on one or more computers. This example of a distributed system in a Windows domain shows a tested system within the maximum limits of the software. This example system is defined as having 20 clients, each on their own computer, up to one HMI server on a computer, and one alarm and data server on a computer.

The FactoryTalk Directory is on its own computer.

This is just an example, and other combinations of HMI servers, data servers, FactoryTalk Directory and HMI clients can be used.

\*These components can be made redundant. The primary and secondary HMI, Data, or Alarm Servers should be hosted on separate servers.



**Computer A (FactoryTalk Directory): Configuration**

- FactoryTalk Directory, uses Network directory for distributed

**Computer A (FactoryTalk Directory): Capacity**

- Recommended processor speed: 2GHz or more, Dual core processor .
- Recommended RAM is 4 GB or more (Refer to Installation Guide for more details)

**FactoryTalk View Studio Software: Configuration**

- Used to Administer HMI Server
- Create tags
- Create displays
- Configure alarming
- Configure datalogging and/or trendin.
- Create macros

**Computer D (Engineering Workstation): Configuration**

- Typical software installed:
  - Controller programming software
  - Network programming software
  - HMI programming software

**Computer E (Domain Controllers): Configuration**

- Replicating (Recommended)
- Requires Server-Class OS

**Computer B (HMI Server): Capacity**

- Recommended processor speed: 2GHz, Quad core processor or more.
- Recommended RAM is 2 GB or more (Refer to Installation Guide for more details)
- HMI Server - limit of 1 HMI server per Host
- HMI Server: The total # of graphics is determined by licensed amount: 25, 100, 250, unlimited. Each HMI server requires a license.
- Graphic: There can be a max of 3000 tags or expressions on a graphic.
- Alarming
- Datalogging
- Trending

**Computer B (HMI Server): Performance**

- Recommended steady-state CPU Utilization is 40% or less for all applications running, to allow for performance spikes

**Computer C (Alarm Server & Data Server): Configuration**

- Data Server
- Alarm Server

**Computer C (Alarm Server Data Server): Performance**

- Recommended steady-state CPU Utilization is 40% or less for all applications running, to allow for performance spikes

**Computer C (Alarm Server & Data Server): Capacity**

- It is recommended that no more than 3 Data Servers be configured to connect to a single controller.
- A single Alarm Server can support a maximum of 10,000 alarms.

**Network Switch: Configuration**

- Use a Layer 2 or Layer 3 managed switch.

**Computer F (HMI Clients): Configuration**

- When determining the number of clients in a system, consider the demand on the controller for data and the worst-case load. Every client with displays open puts tags on scan.

**Computer F (HMI Clients): Capacity**

- Recommended processor speed: 2GHz, Dual core processor or more.
- Recommended RAM is 4 GB or more. (Refer to Installation Guide for more details)

**Controller: Configuration**

- RSLinx Enterprise is the preferred data server for Rockwell Automation devices (ControlLogix, MicroLogix, SLC, PLC5, etc.)
- RSLinx Classic may be used as a data server if alias topics or complex paths are required.
- Use a 3rd party OPC server such as KepWare or Matrikon for communications with 3rd party devices.
- If 3rd party OPC clients are required, use FactoryTalk Gateway in conjunction with RSLinx Enterprise to provide OPC data.

**Controller: Capacity**

- Controller CPU and Memory are used to service communications, as well as program needs.
- Periodic task usage is recommended with scheduled breaks for communications.
- Use arrayed tags instead of scattered tags for optimized communications.
- \*\*See ControlLogix Design Considerations for detailed information

## FactoryTalk View Site Edition Network - Domain Bill of Materials for Software Installation

### Computer A - FactoryTalk Directory

Install FactoryTalk Services Platform,  
included with FactoryTalk View Studio

### Computer B - HMI Server

9701-VWSy FactoryTalk View Site Edition server  
• Licensed by # of displays: 25, 100, 250, unlimited

Includes FactoryTalk Services Platform

### Computer C - Alarm Server & Data Server

Includes RSLinx Enterprise  
FactoryTalk Alarms and Events  
Includes FactoryTalk Services Platform

### Computer D - Engineering Workstation

9324-RLx RSLogix 5, 500, or 5000 as needed for controller type  
9357-x RSNetWorx if needed

RSLinx Classic Installed  
9701-VWSx FactoryTalk View Studio  
Includes FactoryTalk Services Platform

### Computer E - Domain Controller

There should not be any application software installed on the  
Domain Controller computer.

### Computer F - HMI Client

9701-VWSx FactoryTalk View Site Edition Client  
Includes FactoryTalk Services Platform

### Supported Limits (v7.0 and after):

10 HMI Servers per application  
10 Data Servers per application  
10 Alarm Servers per application  
50 Clients per application

## About this Configuration:

### FactoryTalk View Site Edition (Network) - Domain

#### Use this option when:

1. Remote connections exist between client computers and server computers.  
For example, when a client or data server is located on another computer different from the HMI server computer.
2. There are more than 10 computers in the network.
3. Centralized Windows security administration is required.

#### Every FactoryTalk SE system has 6 components:

1. The **\*HMI server**, which is the HMI project and contains all of the graphics, tags, macros, etc. for a logically defined area of the HMI system.
2. The **\*Data server**, which sends and receives data from a data source - usually a controller.
3. The **\*Alarm server**, which makes alarm information from controllers and servers available to the HMI system.
3. The **HMI client or clients**, which display information to the user and can accept user input to be sent to the controller.
4. The **FactoryTalk Directory**, which acts as the "look up" service for a distributed application to find what computer is hosting which component.
5. **FactoryTalk View Studio**, allows users to create applications in a single design environment.

In a distributed system there are HMI servers, data servers and alarm servers, and HMI clients on one or more computers. This example of a distributed system in a Windows domain shows a tested system within the maximum limits of the software. This example system is defined as having 20 clients, each on their own computer, up to one HMI server on a computer, and one alarm and data server on a computer.

The FactoryTalk Directory is on its own computer.

This is just an example, and other combinations of HMI servers, data servers, FactoryTalk Directory and HMI clients can be used.

\*These components can be made redundant. The primary and secondary HMI, Data, or Alarm Servers should be hosted on separate servers.

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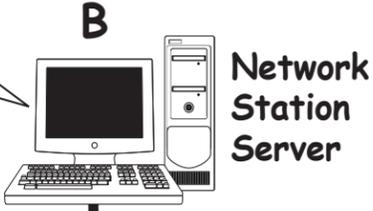
2

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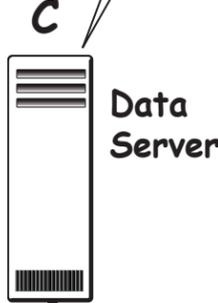
FactoryTalk View Studio, allows users to create applications in a single design environment.

The HMI clients, which display information to the user and can accept user input to be sent to the controller.

The HMI server, which is the HMI project and contains all of the graphics, recipes, etc. for a logically defined area of the HMI system.



The Data server provides clients with access to data source information, such as tags from a controller.  
A Data server can be shared by multiple Network Station application servers.

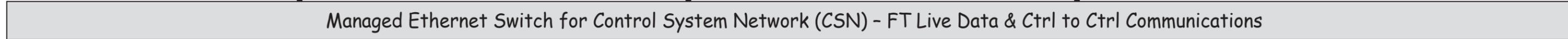


Each Network Station server is required to have FactoryTalk View Server, Client, and Studio installed.  
Additional Network Station applications are separate from other Station servers, but share the same Directory resources.

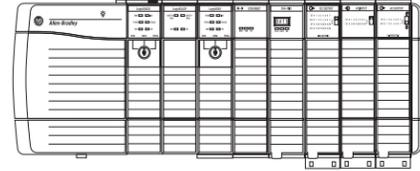
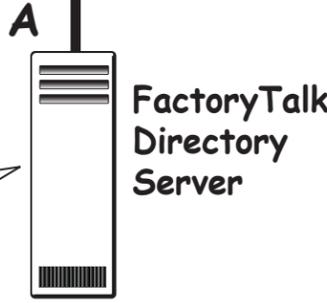


A Data server can be located on a separate computer, or on the Network Station Server.

An Alarm server, which makes alarm information from controllers and servers available to the HMI system, can be located on the Network Station server or a separate server.



The FactoryTalk Directory which acts as the lookup service for an application to find what computer is hosting which application.



Data Sources  
• Rockwell and Third Party  
• ControlLogix  
• PLC / Other Controllers

**Notes:**  
• For architectures with less than 10 FactoryTalk computers (as pictured here,) a domain is not required; a workgroup can be used.  
• For architectures making use of a domain, it is recommended to use more than one domain controller such that a host failure will not interrupt domain services.  
• Network Station can be used to communicate with data and alarm server hosts that are part of the same Network FactoryTalk Directory, even if those components are not located on the same host as the View SE Network Station server.  
• For more on sharing a server between multiple applications, Refer to AID 575705 - How to configure FactoryTalk View SE Network Station applications to share a data server ([https://rockwellautomation.custhelp.com/app/answers/detail/a\\_id/575705](https://rockwellautomation.custhelp.com/app/answers/detail/a_id/575705)).  
• In the absence of multiple applications and multiple servers, the FactoryTalk Directory can be located on the View SE Network Station HMI Server host. When multiple applications or servers are present, the FTD is recommended to have its own independent host.

Note: For FactoryTalk View Design Guidelines, please refer to KnowledgeBase ID 32549

Use this Drawing for applications that have no need for remote clients and only require a standalone application, but still have the need to:  
• Access network-scoped products like FactoryTalk Historian ME and SE and FactoryTalk Batch.  
• Participate in network-scoped FactoryTalk Security.  
• Access an off-box RSLinx Enterprise Data Server that can be configured for redundancy.

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## FactoryTalk View Site Edition Network Station Bill of Materials for Software Installation

### Computer A - FactoryTalk Directory Server

Install FactoryTalk Services Platform

### Computer B & D - Network Station Server

FactoryTalk View Site Edition Server

• Licensed by # of displays: 25, 100, 250, unlimited

FactoryTalk View Site Edition Client

FactoryTalk View Studio

May include RSLinx Enterprise

FactoryTalk Alarms and Events

Includes FactoryTalk Services Platform

### Computer C - Data Server

Includes RSLinx Enterprise

Includes FactoryTalk Services Platform

### Supported Limits (v7.0 and after):

20 Network Station applications per Network FactoryTalk Directory

1 HMI Server per Network Station Server

1 client per Network Station Server

### About this Configuration:

#### FactoryTalk View Site Edition Network Station

#### Use this option when:

1. Access network-scoped products like FactoryTalk Historian ME and SE and FactoryTalk Batch.
2. Participate in network-scoped FactoryTalk Security
3. Access an off-box RSLinx Enterprise Data Server that can be configured for redundancy.

#### Every FactoryTalk Site Edition system has 6 components:

1. The **\*HMI server**, which is the HMI project and contains all of the graphics, tags, macros, etc. for a logically defined area of the HMI system.
2. The **\*Data server**, which sends and receives data from a data source - usually a controller.
3. The **\*Alarm server**, which makes alarm information from controllers and servers available to the HMI system.
3. The **HMI client or clients**, which display information to the user and can accept user input to be sent to the controller.
4. The **FactoryTalk Directory**, which acts as the "look up" service for a distributed application to find what computer is hosting which component.
5. **FactoryTalk View Studio**, allows users to create applications in a single design environment.

In a Network Station system, there is one HMI server and one HMI client, both installed on the same computer. There can be multiple alarm and data servers, installed on the same computer as the HMI server and client, or on a separate computer.

In this example of a Network Station system, there are two Network Station servers, each with one HMI server and client. One Network Station server has a data and alarm server. Both servers are sharing a data server located on a third computer. The FactoryTalk Directory server is on a separate, fourth computer.

\*These components can be made redundant. The primary and secondary HMI, Data, or Alarm Servers should be hosted on separate servers.

4

3

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1

**Computers B & D (HMI Server): Capacity**

- Recommended processor speed: 2GHz, Dual core processor or more.
- Recommended RAM is 4 GB or more (Refer to Installation Guide for more Specification)
- HMI Server - limit of 1 HMI server per Host HMI Server:
- The total # of graphics is determined by licensed amount: 25, 100, 250, unlimited.
- Each HMI server requires a license.
- Graphic: There can be a max of 3000 tags or expressions on a graphic.
- Alarming
- Datalogging
- Trending

**Computer C (Data Server):**

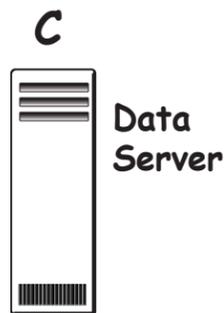
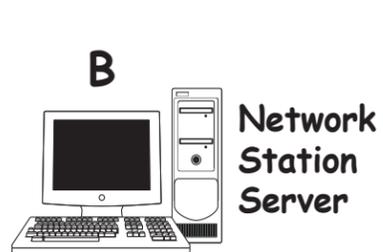
- RSLinx Enterprise is the preferred data server for Rockwell Automation devices (ControlLogix, MicroLogix, SLC, PLC5, etc.)
- RSLinx Classic may be used as a data server if alias topics or complex paths are required.
- Use a 3rd party OPC server such as KepWare or Matrikon for communications with 3rd party devices.
- If 3rd party OPC clients are required, use FactoryTalk Gateway in conjunction with RSLinx Enterprise to provide OPC data

**Computers B, C & D: Performance**

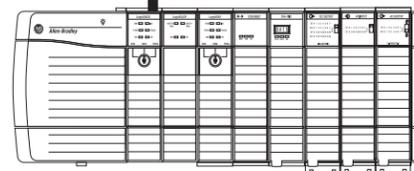
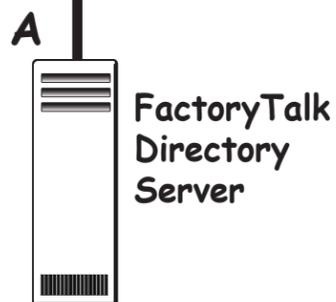
Recommended steady-state CPU Utilization is 40% or less for all applications running, to allow for performance spikes

**Computers B, & D (Alarm Server): Capacity**

Up to 10,000 alarms can be defined on a single alarm server.



Managed Ethernet Switch for Control System Network (CSN) - FT Live Data & Ctrl to Ctrl Communications



- Data Sources
- Rockwell and Third Party
  - ControlLogix
  - PLC / Other Controllers

**Computer A (FactoryTalk Directory): Configuration**

- FactoryTalk Directory, uses Network directory

**Computer A (FactoryTalk Directory): Capacity**

- Recommended Server Operating System
- Recommended processor speed: 2GHz or more, Dual core processor .
- Recommended RAM is 4 GB or more (Refer to Installation Guide for more information)

**Controller: Capacity**

- Controller CPU and Memory are used to service communications, as well as program needs
- Periodic task usage is recommended with scheduled breaks for communications
- Use arrayed tags instead of scattered tags for optimized communications

\*\*See ControlLogix Design Considerations for detailed information

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## FactoryTalk View Site Edition Network Station Bill of Materials for Software Installation

### Computer A - FactoryTalk Directory Server

Install FactoryTalk Services Platform

### Computer B & D - Network Station Server

FactoryTalk View Site Edition Server

- Licensed by # of displays: 25, 100, 250, unlimited

FactoryTalk View Site Edition Client

FactoryTalk View Studio

May include RSLinx Enterprise

FactoryTalk Alarms and Events

Includes FactoryTalk Services Platform

### Computer C - Data Server

Includes RSLinx Enterprise

Includes FactoryTalk Services Platform

### Supported Limits (v7.0 and after):

20 Network Station applications per Network FactoryTalk Directory

1 HMI Server per Network Station Server

1 client per Network Station Server

- must be installed on the Network Station Server

### About this Configuration:

#### FactoryTalk View Site Edition Network Station

#### Use this option when:

1. Access network-scoped products like FactoryTalk Historian ME and SE and FactoryTalk Batch.
2. Participate in network-scoped FactoryTalk Security
3. Access an off-box RSLinx Enterprise Data Server that can be configured for redundancy.

#### Every FactoryTalk Site Edition system has 6 components:

1. The **\*HMI server**, which is the HMI project and contains all of the graphics, tags, macros, etc. for a logically defined area of the HMI system.
2. The **\*Data server**, which sends and receives data from a data source - usually a controller.
3. The **\*Alarm server**, which makes alarm information from controllers and servers available to the HMI system.
3. The **HMI client or clients**, which display information to the user and can accept user input to be sent to the controller.
4. The **FactoryTalk Directory**, which acts as the "look up" service for a distributed application to find what computer is hosting which component.
5. **FactoryTalk View Studio**, allows users to create applications in a single design environment.

In a Network Station system, there is one HMI server and one HMI client, both installed on the same computer. There can be multiple alarm and data servers, installed on the same computer as the HMI server and client, or on a separate computer.

In this example of a Network Station system, there are two Network Station servers, each with one HMI server and client. One Network Station server has a data and alarm server. Both servers are sharing a data server located on a third computer. The FactoryTalk Directory server is on a separate, fourth computer.

\*These components can be made redundant. The primary and secondary HMI, Data, or Alarm Servers should be hosted on separate servers.