CENTAUR®
User Guide

6SS

TABLE OF CONTENTS

TABLE OF FIGURES

1. INTRODUCTION

As security surveillance networks rapidly develop and applications become diversified, demands for network infrastructure reliability are increasing, especially in nonstop network transmission applications. By allowing Milestone System to have automatic failover feature on the Management Server and the SQL Server levels without the need to use proprietary clustering mechanisms and without the need of dedicated storage and advanced IT personnel skills, 6SS Centaur® will contribute in increased security by maximizing system uptime and eliminating single point of failure in addition to decreasing the deployment cost and the most important thing is that it only takes less than a minute to be configured.

6SS Centaur® is a standalone application developed in order to provide an automatic failover mechanism for both Milestone Management Server and SQL Server including SQL Server Express without the need to use Windows Clustering feature which requires advanced IT competency, a domain environment and shared storage. It is fully integrated with Milestone System Event Server and Alarm Manager in order to allow the operators to be notified once a physical server or service goes down.

Centaur® Main Features

- Seamless Management Server Failover
- Seamless SQL Server Failover
- Server status monitoring
- Real-time data synchronization between primary and secondary servers
- Automatic switching between primary and secondary servers with no data loss
- No system downtime
- Alarm generation in case of any failure on the main server
- Fully integrated with Milestone Alarm Manager and Event Server
- Does not require dedicated storage
- Does not require advanced IT skills
- Does not depend on proprietary clustering technologies
- Does not require a dedicated server
- Fast configuration and deployment

2. GETTING STARTED

2.1 System Requirements

- Windows OS 8.1 or above
- Microsoft SQL Server Express, Standard or Enterprise edition
- Milestone XProtect Corporate, XProtect Expert, XProtect Professional+, or XProtect Express+
- Failover Application v1.0 or above

2.2 Quick Start

- Milestone XProtect already installed
- Start the Failover Application installation by opening the setup.exe on the secondary server.

2.3 System Introduction

6SS Centaur® is an application that groups two Milestone Management Servers, or two SQL Servers into a virtual entity. It allows logical devices to work separately from physical devices. The primary server and the secondary server will each have its own physical IP address and they will be combined together to form a virtual server with its own separate virtual IP address. All the Management Server entities including the Event Server and the Alarm Manager in addition to the SQL Server will be configured to use the Virtual IP Address in all system communications and 6SS Centaur® will make sure to forward the data to the primary server. Real-time data replication and synchronization will assure that the secondary server will take over in case the primary server goes down with no downtime or system interruption. An alarm will be triggered in the Smart Client in case of a faulty server.

6SS Centaur® does not require a dedicated server, it can be installed on the secondary server and thus reducing IT infrastructure cost.

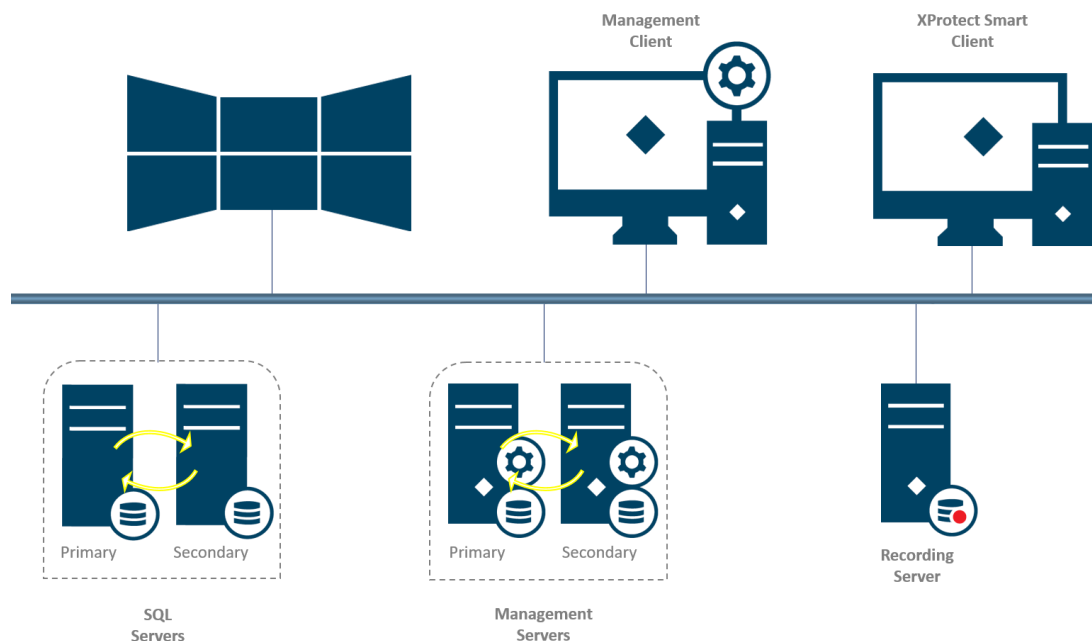The below figure describes the architecture of 6SS Centaur® functionality and its related components.

FIGURE 1: 6SS CENTAUR® ARCHITECTURE

3. CENTAUR® SETUP

3.1 Setup Wizard

First open the copied file received and double click on **FaileoverSetup** to start the installation.
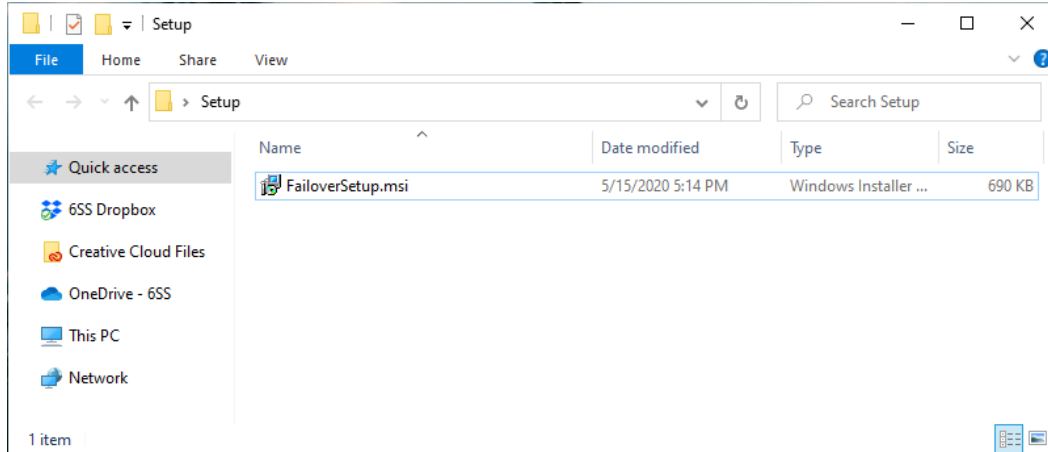

FIGURE 2: FAILOVER SETUP

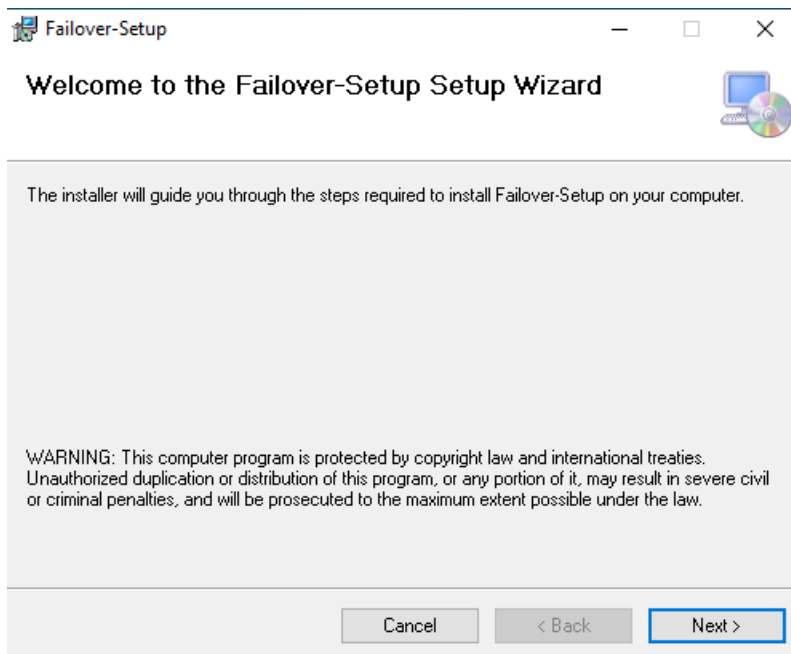The setup wizard opens, click **Next** to continue.

FIGURE 3: FAILOVER SETUP WELCOME PAGE

3.2 Installation Folder

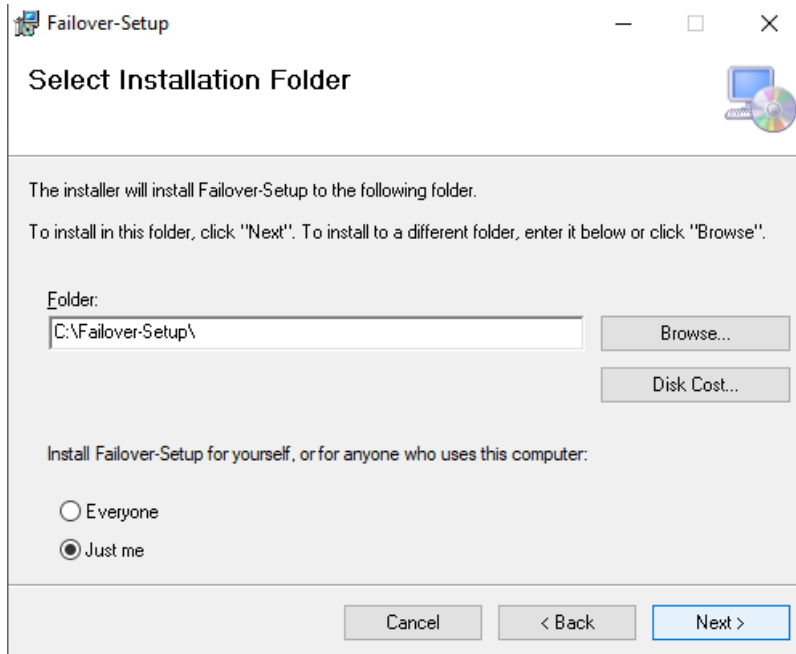Choose Failover installation folder path and click **Next**.

FIGURE 4: SELECT INSTALLATION FOLDER

3.3 Complete Installation
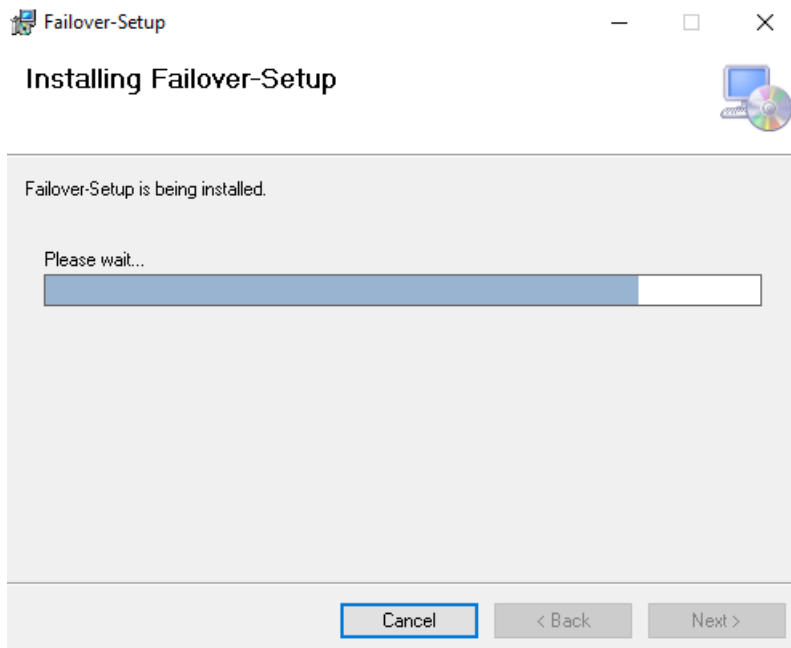
Confirm the Installation by clicking **Next** and check that the plugin is being installed.

FIGURE 5: INSTALLING FAILOVER SETUP

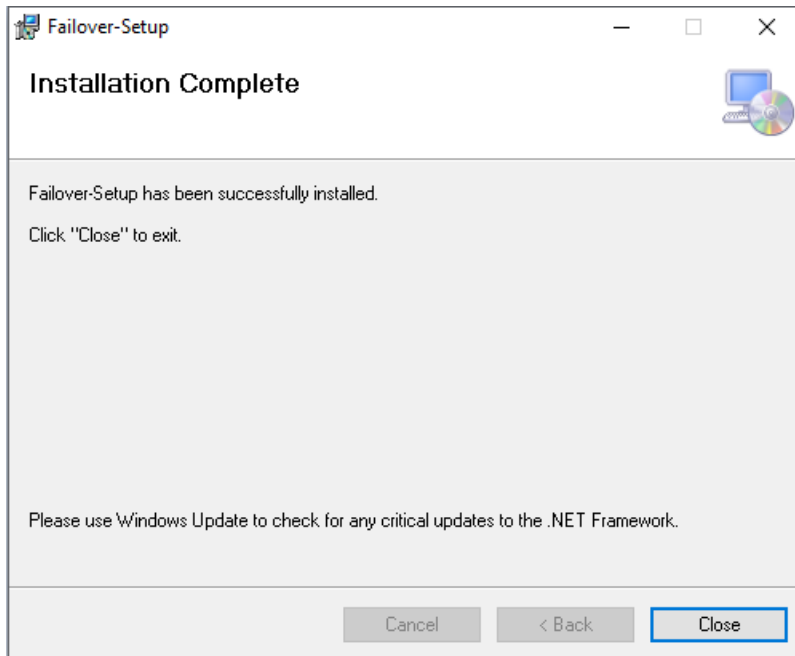Once the installation is completed click **Close** to finish.

FIGURE 6:FAILOVER SETUP INSTALLATION COMPLETE

4. CENTAUR® APPLICATION

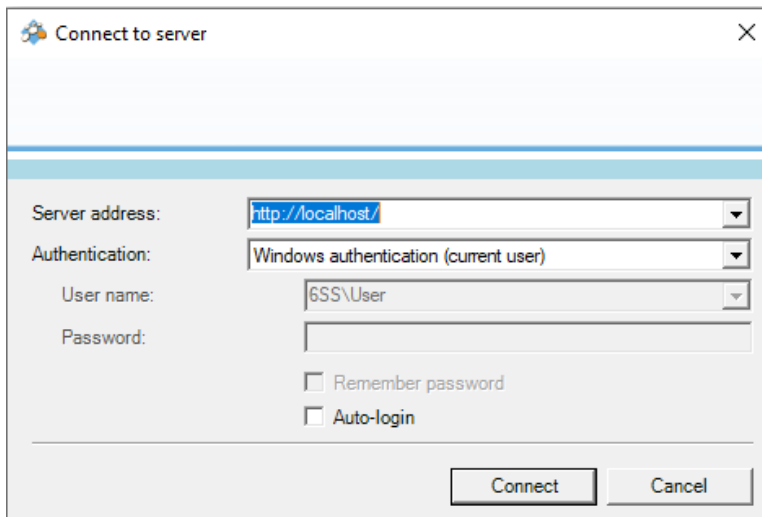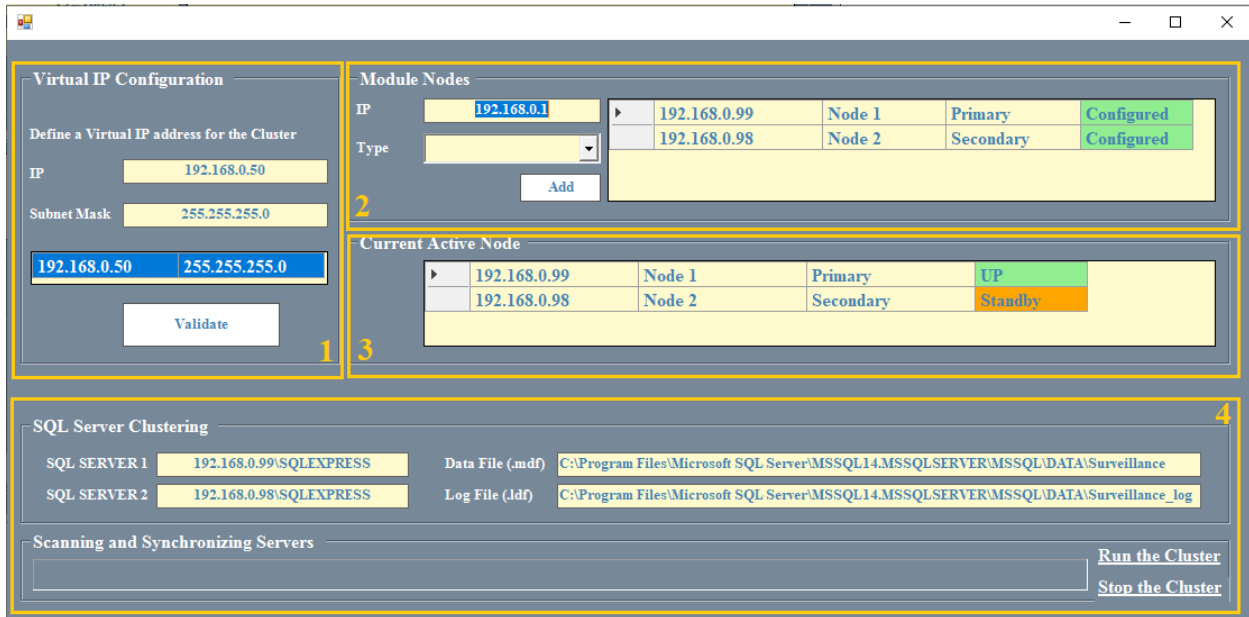Open failover app previously installed, specify SQL server address and click **Connect**.

FIGURE 7: CONNECT TO SERVER

(1) Start by defining a virtual IP for the cluster using the panel **Virtual IP Configuration** and make sure that it does not conflict with the existing IPs on the network and click **Validate** button.

(2) Next, specify in **Module Nodes** panel the IP address of **Node 1** module (192.168.0.99) and choose **Primary** as a type, click **Add** to submit. Then add the IP address of **Node 2** module (in this example 192.168.98) with type **Secondary** and click **Add** to submit.

(3) In the **Current Active Node** panel check the current state of the previously defined nodes. After running the cluster in step (4) and whenever the primary node goes down, the secondary node will automatically take over, with no data loss during this transition period. In addition, an alarm will be generated in Milestone XProtect Smart Client- Alarm Manager tab to notify users when a node goes down.

(4) Run the cluster to scan and synchronize both servers with same configuration.

FIGURE 8: FAILOVER APP CONFIGURATION