

For Milestone XProtect® Users:

A proprietary plug-in is available for users who install Fisheye cameras in a deployment managed by Milestone XProtect Corporate or Enterprise IP solutions. The plug-in enables image dewarp, pan, tilt, and zoom in/out over a video feed using a mouse or joystick.

Complete the following procedure as the prerequisites for installing Milestone's SmartClient and the plug-in:

1. Download VIVOTEK's fisheye plug-in from: <http://www.vivotek.com/downloads/downloads.php?kind=plugin>.
2. Install the **.NET framework 4.0** client profile*. The .NET framework is essential for installing SmartClient.
2. Install the **DirectX runtime (9.29.1974)**** and above. The DirectX runtime is also necessary to the plug-in for managing DirectDraw.
3. Install the Milestone XProtect SmartClient 7.0a or above.
4. Unzip and copy the plug-in files to the following folder:
 - 4-1. By default, a sub-folder named **MIPPlugins** is available under the Milestone SmartClient 7.0 installation path. The file path should look like the following:
[C:\<Milestone installation path>\XProtect Smart Client\MIPPlugins](#)
 - 4-2. Create a sub-folder as "**VivotekFisheye**" under the MIPPlugins folder.
 - 4-3. Extract the files from [VivotekFisheyeEnhancer_1.0.0.1.zip](#) to [C:\<Milestone installation path>\XProtect Smart Client\MIPPlugins\VivotekFisheye](#)

* <http://www.microsoft.com/download/en/details.aspx?id=17851>

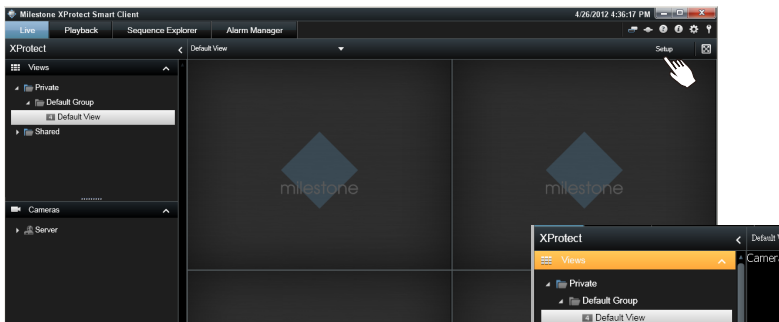
** <http://www.microsoft.com/en-us/download/details.aspx?id=8109>

Prerequisites for Fisheye cameras:

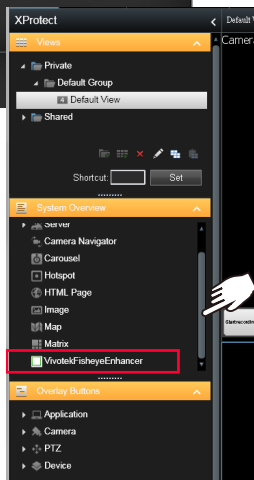
1. To authenticate the use of the plug-in functionality, you must turn on a watermark on VIVOTEK's fisheye cameras:
 - 1-1. Upgrade firmware to version 0100f or above.
 - 1-2. Use the following URL command to turn the watermark on or off:
ON: http://<CAMERA_IP_ADDRESS>/cgi-bin/admin/setparam.cgi?videoin_c0_enablewatermark=1
OFF: http://<CAMERA_IP_ADDRESS>/cgi-bin/admin/setparam.cgi?videoin_c0_enablewatermark=0

To enable the plug-in:

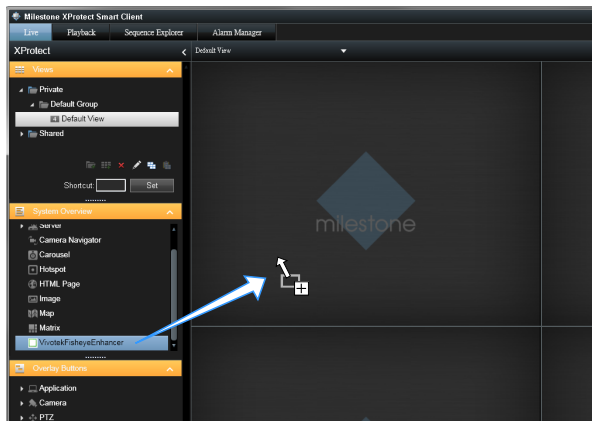
1. Make sure your fisheye cameras have already been added as **Hardware Devices** in the XProtect Enterprise/Corporate server's Management Application.
2. Start the XProtect Smart Client.
3. On the Live view window, click on **Setup**.



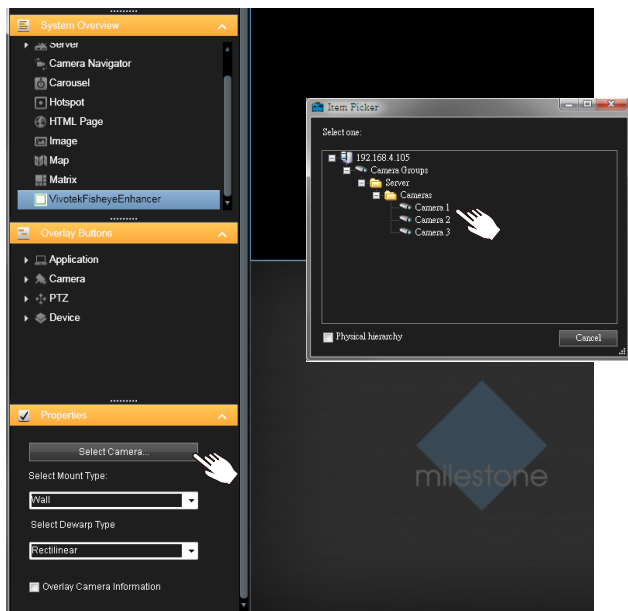
4. On the Setup window, search for the "VivotekFisheyeEnhancer" plug-in by dragging the pull-down menu on the System Overview pane to the bottom.



5. Click and drag the VivotekFisheyeEnhancer to a view cell. When done, the view cell will be highlighted by a light blue out frame.

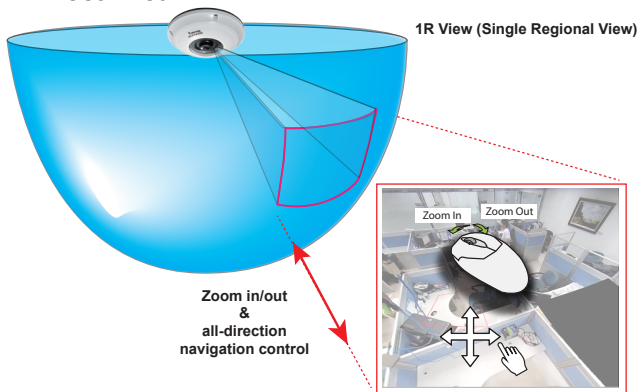


6. Locate the **Properties** pane, and click on the **Select Camera...** button. An **Item Picker** window will prompt. Unfold the device tree and select a VIVOTEK fisheye camera.

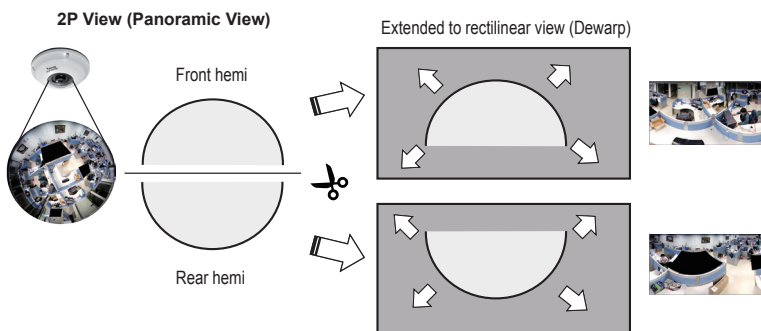


7. Select appropriate camera **Mount Type** and **Dewarp Type**. Select the **Overlay Camera Information** checkbox to enable a camera ID caption on the view cell. The working theories of different dewarp types are illustrated below:

Rectilinear



Double Panorama



8. You can now click on the **Setup** button to return to the **Live** view or **Playback** window, and exert control on the view cell using a mouse or joystick. Click on a view cell, hold down the mouse button, and move your mouse around to change view angle. Use scroll wheel to zoom in or out. Shown below is the availability of Dewarp modes for different Mount types:

Dewarp mode \ Mount type	Wall	Ceiling	Floor
Rectilinear	Yes	Yes	Yes
Full Panorama	Yes	Yes	Yes
Double Panorama	N/A	Yes	Yes