

Mobile and Smartclient connectivity setup and troubleshooting for Xprotect® Enterprise 8.0 or one of the streamlined Xprotect Products®

Firstly welcome one and all to my first Support newsletter article, in it I hope to detail allot of the common issues and troubleshooting steps which you can take to get your XProtect enterprise or on o the streamlined Xprotect Products accessible over the World Wide Web.

There are 2 main methods you can be using for internet connectivity, firstly is for the Mobile access and secondly is for Smartclient and the Remoteclient.

Xprotect Mobile



Firstly to have your Android or iPhone access the XProtect installation you will require a separate mobile server to be installed, this is a free download from the download section of our website(<http://www.milestonesys.dk/supportandservices/support/downloads/>) It can be installed on the XProtect server itself or a separate server if required.

Install

The install is reasonably straight forward however we have a few common questions.

- Why does my install constantly prompt for .net 3.5 on my windows 7/2008 system?

Firstly ensure you do have .net 3.5 installed on the machine in question. In windows 7 and 2008 r2 this is done by going to "control Panel -> programs and features -> Turn Windows features on or off" Once populated scroll down to Microsoft .net Framework 3.5.1 and ensure it is checked. If it is then please use the following download, extract and then double click the registry file to import registry file and register the .net 3.5 framework with the Operating System correctly

http://download.milestonesys.com/Solution_00000564.zip

data within the registry file.

Windows Registry Editor Version 5.00

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\NET Framework Setup\NDP\v3.5\1033]
```

```
"Version"="3.5.30729.5420"
```

```
"CBS"=dword:00000001
```

```
"Install"=dword:00000001
```

```
"SP"=dword:00000001
```

- How do I select a custom port for the mobile server to be connected to?

When performing the install you can select to change the port which the mobile server will run on, this can be done by selecting to perform a custom install.

- What details do I put in when prompted for the primary surveillance server?

This will be the connection to your XProtect server, the server URL should consist of

<http://<hostname/IP of the XProtect server>:<port the image server is running on>>

You can find out the port your system is running on by opening the management application, selecting the "Server Access". Under this tab there is a "Local port" which is the value you need.

You then need to supply an administrative user to bind the Xprotect Mobile and your surveillance server.

- I've installed the server but why don't I have access to the management plugin

You will only have access to the management plugin if you are not using Xprotect GO or Xprotect essential, neither of these streamlined versions support use of the SDK needed to use the management plugin.

Configuration

- When I click the status tab on the mobile server in the management application I get not connected "please restart your Mobile server service"

Firstly double check that the port and hostname you are listing is correct the default port for XProtect Mobile is port 8081, also ensure that there is no firewall blocking this port. Do restart the Mobile server, this can be done from the windows services and do restart the management application. In some cases we have seen that all Milestone services needed to be restarted to have the service detected correctly.

- How do I change the Xprotect Mobile port after the install?

Generally we have found the best method is to reinstall Xprotect Mobile and select to perform a custom install, changing the port from the default 8081 when prompted.

Troubleshooting

For the purpose of the below I will presume that we are using the default Mobile server port of port 8081.

- Firstly check that the mobile server is running this is seen under the Windows services and is called “Milestone Xprotect Mobile Service” and has the status started.
- Check the Logs to see if you can see the Mobile server come up and confirm the port it came up on. The logs are located as default under C:\ProgramData\Milestone\XProtect Mobile Server\Logs\<latest log>. If you have restarted the service then you should see a line indicating the port the service started up on, similar to the below line.
1769-05-01;09:20:31;UTC+01:00;00000000-0000-0000-0000-000000000000;State;HTTP;OK;;Starting HTTP communication channel on port/path: 8081/XProtectMobile/Communication
- Check there are no firewalls (including the windows firewalls) which aren’t blocking the connection to the server.
- When you try to connect you should see a logon attempt in the log file listed if not then there is some issue with the client setup reaching the server.
- If you see the connection but have a time out message then this indicates that the imageserver is not reachable, this may be down to an incorrect setting during the install or that the imageserver service is not running.
- Try to open port 8081 on the Mobile server machine using your web browser (<http://localhost:8081>) this should **not** return a web page, we have seen cases where other services are trying to run on the port in question and in many cases it was a web service.
- Open a command prompt and run the command netstat -nao this will list off the local address, port, state and process ID of the process on that port. If you see multiple entries on port 8081 then something else is using the port and you can reference Process IDs against your task manager to chase down the offending process.
- We have also seen cases where certain service providers are blocking port 8081. In this case re run the mobile server installer, select custom and try a different port when prompted 2021 for example.
- If possible try and connect a mobile device to your server using a local wireless connection, if this works, but it fails when coming over the internet then the problem is either a misconfigured firewall rule not forwarding port 8081 correctly or that your ISP is blocking the port.

Master/Slave

For the mobile server on Master slave setups there is no special requirement to setup the Mobile server differently, as long Mobile server is configured to use the master server and has access to the slave server then the cameras will be available.

Smartclient



Install

Generally the install for the Smartclient is already done however it is worth noting that the latest version of the Smartclient (at time of writing 7.0a) is compatible with all our XProtect range, XProtect Corporate and XProtect Enterprise or any of the other streamlined XProtect Products and is backwards compatible with older versions of our software.

You can download this freely from our download page and it includes many updates to exporting, layout and PTZ operation I cannot recommend updating to this version enough.

Configuration

Regarding the Smartclient you need to fill out the server access section of the management application. This will allow the Smartclient to connect to the setup.

Decide on an external port and determine your external IP (www.whatsmyip.com will usually indicate the external address you are using). Regarding the port, any port will be valid but this external port will need to be forwarded onto the internal port of your imageserver.

So if your external port is 2000 and your internal port is port 80 you should create a rule forwarding port 2000 to port 80 on your XProtect machine.

You then fill out the server access section appropriately.



Server Name	Local Port	Internet Access	Internet Address	Internet Port	Max. No. of Clients
MyMilestoneServer	82	<input checked="" type="checkbox"/>	89.104.196.13	2000	1000

You should now be able to connect your Smartclient via the external connection entering the server address in the following syntax

http://<your external ip>:<your external port>

e.g.

presuming our external IP was 89.104.196.13 and our internet port was listed as 2000, and we then created a firewall rule to allow port 2000 to connect to our server on port 80 then we would be able to connect to <http://89.104.196.13:2000>.

If you are having issues with this then opening the above page in your browser of choice then it should display the server installation page. If not then the forwarding is being blocked or incorrect.

Common issues

I can connect the Smartclient but I don't see any video – it just shows “connecting to <IP>:<port>”

If the IP listed is the internal IP of the server, but you are connected externally then your router or firewall is translating the external IP to appear sourced from the internal IP of the device. The connection so that it appears to come from an internal address. You see if this is the case by opening the imageserver log (usually located in c:\programdata\milestone\milestone surveillance\ISLog_<date>.log)

You will usually see a connection listed similar to the below

2012-06-01 10:46:40 Connection from: 10.100.0.193 on port: 50102

If the IP listed is the internal address then you need to contact the person or department in charge of configuring the firewall/router to have them remote the NAT.

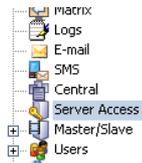
If you are connecting internally but after the configuration the IP and port listed are the external port, then it's possible that the clients are being detected as “local” client connections.

If this is the case you can define their source IPs as being “local” connections by right clicking on the server access section in the management application, selecting Local IP Range and defining the IP ranges which will be regarded as local and thus gives out the local IP of the server for connectivity.

Master/slave

If you are using a master slave setup then you need to define a unique port and/or IP per server. The Master server does not gateway or transcode camera feeds so once the Smartclient is connected to the master server; it will connect separately to the slave servers separately for their feeds. Generally if the servers are on the same site to only use a single external IP you will use different internet IPs for all the servers on site i.e. the master might have its internet IP defined as 89.104.196.13 on port 2000, Slave 1 might have 89.104.196.13 on port 2001, Slave 2 might have 89.104.196.13 on port

2002 etc. etc. You would then create the relative rules to mean that a connection to 89.104.196.13 on port 2000 would connect to the master, 2001 slave1 and 2002 slave2.



Server Access Summary:

Server Name	Local Port	Internet Access	Internet Address	Internet Port	Max. No. of Clients
MyMilestoneMasterServer	80	<input checked="" type="checkbox"/>	89.104.196.13	2000	1000



Server Access Summary:

Server Name	Local Port	Internet Access	Internet Address	Internet Port	Max. No. of Clients
MyMilestoneSlaveServer1	80	<input checked="" type="checkbox"/>	89.104.196.13	2001	1000



Server Access Summary:

Server Name	Local Port	Internet Access	Internet Address	Internet Port	Max. No. of Clients
MyMilestoneSlaveServer2	80	<input checked="" type="checkbox"/>	89.104.196.13	2002	1000