



Connecting to Intelli-M Access from the internet

Primer

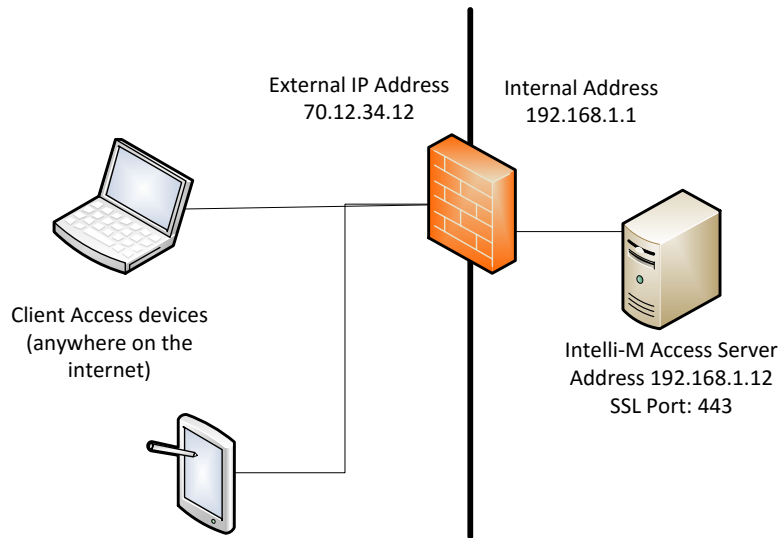
Intelli-MAccess is an all browser based solution. This means that after installing Intelli-MAccess on a server, you manage it by opening a browser such as Internet Explorer, Chrome, Safari, Firefox, etc. and typing the URL of the server with a /intellim at the end. For example <http://myaccessservername/intellim>. This then brings you to the login page where you can login and manage your access control system.

To log into Intelli-MAccess from outside the organization, you need to be able to travel a path from your computer to the Intelli-MAccess server. Typically what prevents this is a firewall often running in the router that connects the organization to the internet. By default, this kind of traffic is blocked to prevent unwanted intrusion. There are several ways to resolve this;

1. VPN - A VPN is a virtual private network, meaning your computer has a secure, authenticated connection to your organization. This is the most secure method of gaining access to internal resources. Once you have a VPN established, using the link above will allow you to log in and manage the access control system. VPN's are not covered here as there are many variations and are complex to get configured.
2. Port Forwarding – Forwarding ports is a way of allowing traffic targeted at a specific destination to be passed on internally. This is less secure than using a VPN, but managed properly can provide a convenient way to manage your system while keeping you relatively secure.
3. Exposing your Intelli-MAccess server to the internet. This is not a secure way to remotely manage your system and therefore we are not going to explain how to do this.

Understanding Port Forwarding

Port forwarding, forwards traffic from the internet to an internal destination. From the outside, you enter the URL <http://70.12.34.12:443/intellim> and the router automatically forwards you to <http://192.168.1.12/intellim>, allowing you to connect and manage your system.



To set up port forwarding take the following steps:

1. Turn on 'Require SSL' from the Configuration->System Settings area in Intelli-MAccess. This will require all connections to Intelli-MAccess to be over a Secure Sockets Layer (SSL) connection. SSL establishes an encrypted pipe from your computer to the server, preventing anyone from watching the traffic that is passing between them, thus preventing someone from seeing sensitive data such as user ID's and passwords. Once you have turned this on the URL for Intelli-M Access must start with <https://> (instead of <http://>). By default Intelli-Maccess uses port 443 for SSL.

While turning on SSL is not required to access Intelli-M from the internet, we very strongly recommend that it be turned on otherwise all traffic will be open and readable by anyone sniffing traffic including the user ID and password used to log in.

Once this is done, make sure it is working by browsing internally to <https://myaccessservername/intellim> You should be able to connect and log in, and this is what you use internally going forward.

2. Make sure you have changed the admin, admin user, and that all logins you have granted to Intelli-MAccess are not obvious and have long passwords that are not common words. Remember that once you are done, anyone who stumbles upon the URL to connect can attempt to login.



3. Set up port forwarding. This will be different depending on the router/firewall that you have, but will typically be called Port Forwarding or Single Port Forwarding. You will need to enter the external port, the internal IP address and port and the Protocol. Traffic from any port can only be forwarded to one internal server, but you can use a different port on the outside. So, you could configure the port forwarding to be;

Application	External Port	Internal Port	Protocol	IP Address	Enabled
<input type="text" value="intellim"/>	<input type="text" value="443"/>	<input type="text" value="443"/>	<input type="text" value="TCP"/>	<input type="text" value="192.168.1.12"/>	<input checked="" type="checkbox"/>

4. You need to know the external IP address of your router. This will listed as the WAN or Internet Connection IP address and will not look like any of your internal IP addresses.
5. Save everything and from the outside of the organization (logically not physically), try browsing to the ip address and port you set up. In the diagram above, this would be <https://70.12.34.12:443/Intellim>. One easy way to test is with a smartphone. Turn off wifi to make sure your connection is external and try browsing to this link.
6. Your router may also support Access Control Lists (ACL) and other ways of limiting external connections to specific source devices to help make the system more secure.