Bandwidth consumption

Contents

1. How Adaptive Defense communicates with the Internet

The following table shows a summary of how the endpoints protected with Adaptive Defense access the Internet for tasks that require communication over the Internet.

Endpoint status	Communication with the server	Signature file updates	Product installation and upgrades	Access to Collective Intelligence and sending of the actions monitored on each endpoint
Connected to the Internet	From the endpoint or another endpoint configured for such purpose.	It shares the signature files downloaded by other networked endpoints thanks to Adaptive Defense's P2P technologies. It only downloads signature files provided no other endpoint has done it previously. It is possible to specify an endpoint to download signature files from the server. This endpoint will also act as a signature repository, so that signature files will not be downloaded again when requested by another computer.	It shares the upgrade packages downloaded by other networked endpoints thanks to Adaptive Defense's P2P technologies. It only downloads upgrade packages provided no other endpoint has done it previously. It is also possible to specify an endpoint to download product packages from the server.	Outbound communications with Collective Intelligence and to send the actions monitored on each endpoint are established from each PC. PCs can connect to the Internet using the corporate proxy. For that, you just have to configure the relevant settings in Adaptive Defense.
Not connected to the Internet (but at least one networked endpoint has an Internet connection)	From the endpoint with the Internet connection, or the endpoint configured to channel all communications with the server.	Updates take place from the endpoint with the Internet connection, or the endpoint configured to channel all communications with the server.	Upgrades take place from the endpoint with the Internet connection, or the endpoint configured to channel all communications with the server.	It is not possible to access Collective Intelligence from endpoints without an Internet connection.

2. Bandwidth consumption summary table

The following table shows a summary of the bandwidth used by Adaptive Defense for each type of communication.

Communication type	Approximate bandwidth usage
Product installation	8.18 MB: Installer and communications agent 61.60 MB: Endpoint protection package
Communication with the server	240 KB every 12 hours (190 KB in messages sent every 15 minutes to check for configuration changes, and 50 KB in status, settings and report messages)
Sending of the actions monitored from each running process	1MB per day per endpoint
Signature file updates**	24.5 MB the first time only, after installing the protection 160 KB every 24 hours for signature file patches
Product upgrades**	8.18 MB: Communications agent 61.6* MB: Endpoint protection package A product upgrade takes place every 6 months approximately.
Queries to Collective Intelligence	Real-time on-access protection: 500 KB: Bandwidth used on the first day, when the cache is empty 35-100 KB: Bandwidth used after the first day, once the information is cached. Full scan of the computer: 200-500 KB: First full scan of the computer. 50-200 KB: Subsequent full scans of the computer.

*62.2 MB for the 64-bit installer

* Signature file updates and product upgrades are downloaded by a single endpoint on the network, and shared by the other networked endpoints thanks to Adaptive Defense's P2P technologies. This is provided all endpoints require the same files.

The signature file patches will be different depending on how outdated the signature files are. For example, if an endpoint has a two-day old signature file and another one has a one-day old signature file, the patches to download will be different.

3. Estimating bandwidth usage

Suppose you have a local **network consisting of N interconnected computers**, and you install Adaptive Defense on them. The bandwidth usage will be approximately as follows:

Communication type	Bandwidth used by N PCs NOT connected in a local network	Bandwidth used on a local network of N PCs
Product installation (1 time only)	8.18 MB for the communications agent & the installer x **N computers** (if no distribution tool is used) + 61.60* MB for the endpoint protection package **x N computers**	8,18* MB for the endpoint protection package **x N computers** (if no distribution tool is used) + 61.60* MB for the endpoint protection package
Communication with the server	240 KB every 12 hours x **N computers**	240 KB every 12 hours x **N computers**
Sending of the actions monitored from each running process	1 MB every day x **N computers**	1 MB every day x **N computers**
Signature file updates	24.5 MB the first time only, after installing the protection* x **N computers** 160 KB every 24 hours (signature file patches) x **N computers**.	24.5 MB the first time only, after installing the protection 160 KB every 24 hours for signature file patches
Product upgrades (approx. every 6 months)	8.18 MB for the communications agent & the installer x **N computers** + 61.60* MB for the endpoint protection package x **N computers**	8.18 MB for the communications agent & the installer + 61.60* MB for the endpoint protection package
Queries to Collective Intelligence	500 KB the first time x **N computers** + 35-100 KB every day x N computers	500 KB the first time x **N computers** + 35-100 KB every day x **N computers**

*62.2 MB for the 64-bit installer

If you select a computer to act as a proxy/repository server, all communications except queries to Collective Intelligence and sending of the actions monitored from each running process will take place through that computer. Additionally, signature files and product upgrades will be stored in the computer selected as the repository (it will not be necessary to download them again if requested by another computer on the network).

4. URLs required by Adaptive Defense

For more information about the URLs used by Adaptive Defense to update, connect to the cloud platform and provide maximum protection thanks to Collective Intelligence, refer to the following article: Which URLs are required for Adaptive Defense / Adaptive Defense 360 to work?

◎ Adaptive Defense

◎ Adaptive Defense 360