

Microsoft Forefront TMG – New features and enhancements of Forefront TMG Service Pack 1

Abstract

In this article I will show you some of the important improvements of Microsoft Forefront TMG Service Pack 1.

Let's begin

Forefront TMG was released in November 2009 and after a few months Microsoft announced the first available preview of the upcoming Forefront TMG Service Pack 1 for Microsoft TAP partners and some other groups.

Since 23.06.2010 Microsoft has released Forefront TMG Service Pack 1, so I can show you some of the important changes and improvements.

The version for this article was a complete Forefront TMG DVD with Service Pack 1, so I had to uninstall my Forefront TMG Server first and after a reboot, I installed the final version of Forefront TMG Service Pack 1.

Please note:

It is not possible to update the special beta version to the RTM version of SP1.

The setup process has no reasonable changes compared to the Forefront TMG RTM version.



Figure 1: No visible changes to the setup process during the TMG SP1 installation

The License Agreement first gives us an overview about the Forefront TMG version to install.

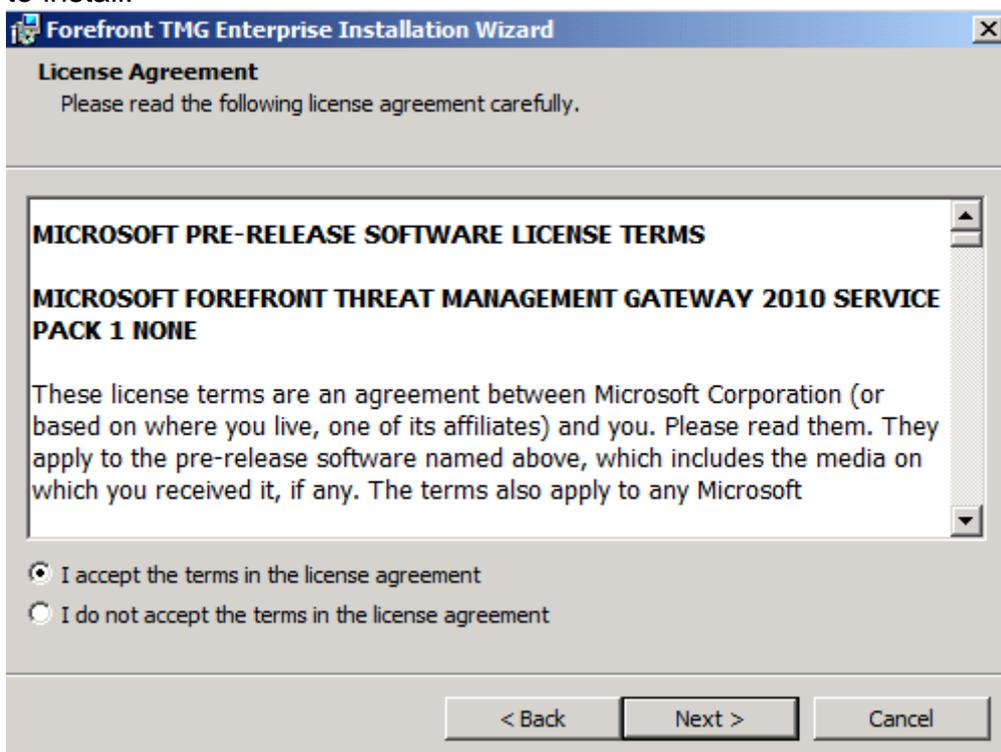


Figure 2: License Agreement for Microsoft Pre-release Software

URL Category override

One of the first changes is the URL override category function in a Firewall access rule which is used with the Built-in URL Filtering of Forefront TMG. The new URL Category override function allows a user to access blocked websites due to the URL category for a limited set of time or during the Web browser session and the timeout set.

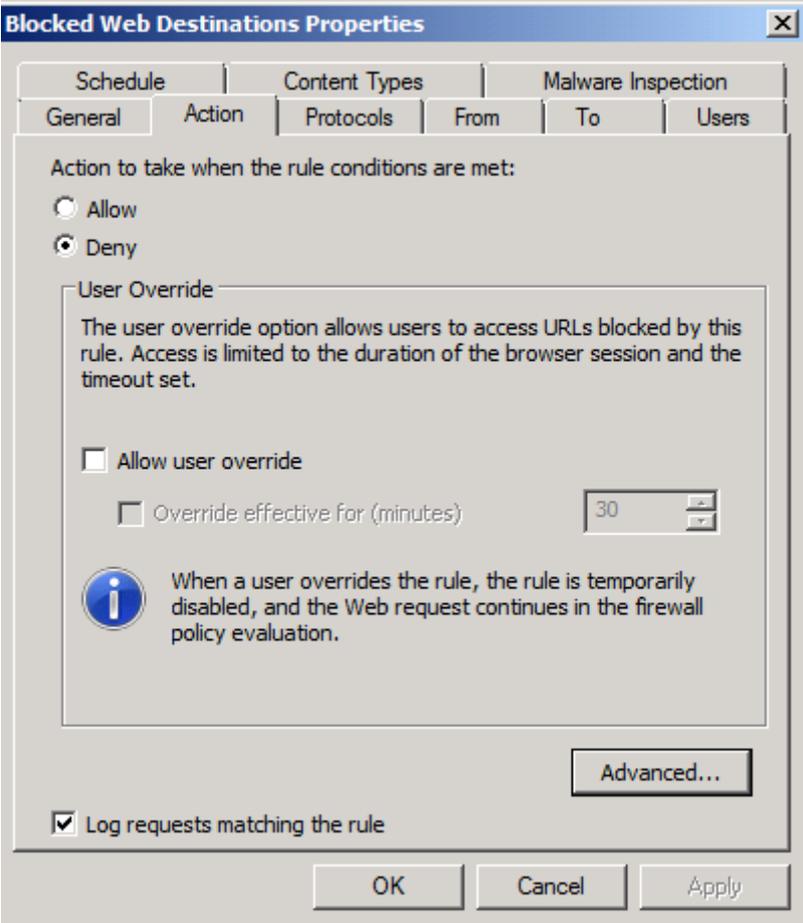


Figure 3: URL category override settings

In the Advanced Properties section it is possible to create a custom denial notification for a user and it is also possible to add the denied URL category to the notification so users are always informed, by which category their attempt to access websites was blocked.

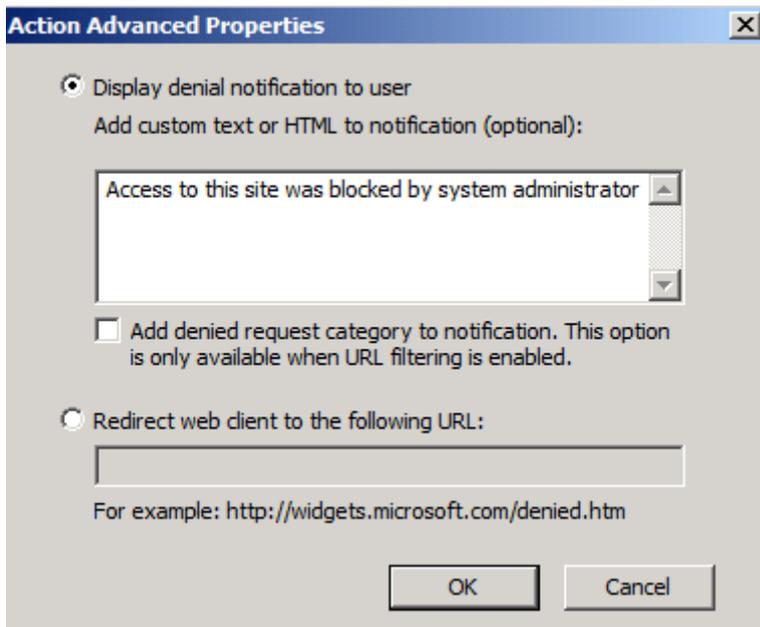


Figure 4: Custom denial notification options

Forefront TMG Service Pack 1 also changed the Logging output options with a new category called Overridden Rule, so Administrators have a good look to see if the website access gets blocked or is allowed through the URL category override function.

Microsoft
Forefront
Threat Management Gateway 2010

Logs & Reports
Enterprise

Logging Reporting

| Filter By | Condition | Value |
|-----------------|-----------|----------------------|
| Log Record Type | Equals | Firewall or Web P... |
| Log Time | Live | |
| Action | Not Equal | Connection Status |

| Log Time | Client IP | Destination IP | Destination Port | Protocol | Action | Overridden Rule | NIS Scan Result | NIS Sigr |
|----------|-----------|----------------|------------------|----------|--------|-----------------|-----------------|----------|
|----------|-----------|----------------|------------------|----------|--------|-----------------|-----------------|----------|

No results found.

Figure 5: URL category override logging in Forefront TMG realtime logging

User Activity Report

Forefront TMG Service Pack 1 comes with a new User Activity Report Job option which gives Administrators a detailed overview about the user activity accessing websites through Forefront TMG.

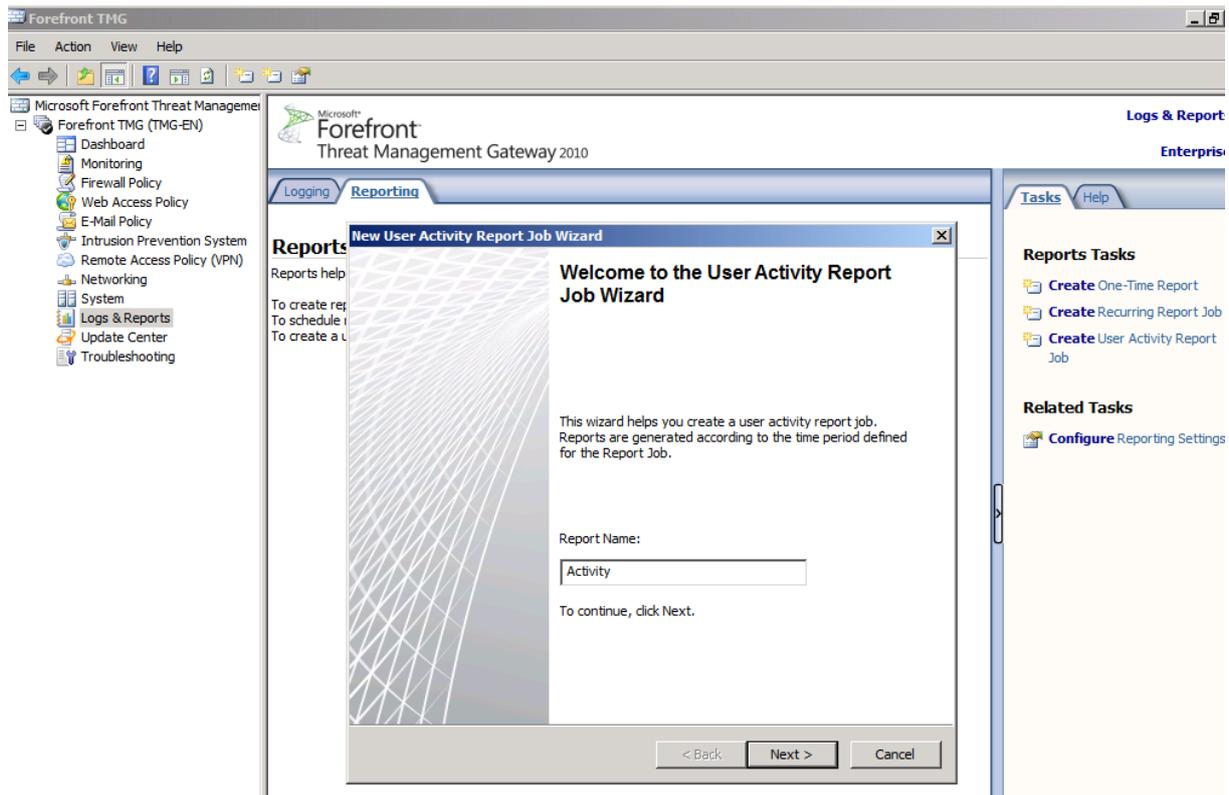


Figure 6: User Activity Report Job Wizard

The new report wizard let you chose which activity types of users should be logged.

Report Details [X]

Category:

Subcategory:

Report details for this subcategory:

| Parameter Name | Parameter Value |
|----------------|-----------------|
| Report Period | Last 7 Days |
| Users | OVERWRITE |

Description:
 You can generate the report for any of the following time periods: the past hour, 24 hours, week, or month. To enter multiple user names and IP addresses, place a semicolon (;) between each entry. For user accounts that are part of a domain, enter the name in the format DOMAIN\username.

Figure 7: Report details

The following screenshot from Microsoft gives you an overview about the new User Activity report option

Web Sites 

The following table summarizes the Web sites that the specified users requested during the report period.

| User | Category | Site | Total Bytes |
|------------|-------------------------------------|------------------------------|-------------|
| [Redacted] | Art/Culture/Heritage | www.disneydreaming.com | 1.65 KB |
| | Blogs/Wiki | syndication.thedailywtf.com | 308.22 KB |
| | | tarboot.wordpress.com | 249.05 KB |
| | | berlinhashvua.blogspot.com | 42.70 KB |
| | | haim.blogspot.com | 35.14 KB |
| | | unimaaustralia.typepad.com | 29.30 KB |
| | | wordpress.com | 1.18 KB |
| | Edge Content Servers/Infrastructure | i2.yimg.com | 12.32 KB |
| | | i3.yimg.com | 7.00 KB |
| | Education/Reference | arts.tau.ac.il | 888.00 B |
| | Media Sharing | www.youtube.com | 4.08 KB |
| | News | www.parshan.co.il | 908.97 KB |
| | Personal Network Storage | public.blu.livefilestore.com | 63.63 KB |
| | | ezgbw.blu.livefilestore.com | 2.63 KB |
| | Politics/Opinion | www.notes.co.il | 662.74 KB |

Figure 7: User Activity report details

Branch Cache

Forefront TMG Service Pack 1 is now able to work as a BranchCache Server in Hosted Mode. For more information about BranchCache read the following article: <http://www.microsoft.com/windowsserver2008/en/us/branch-cache.aspx>

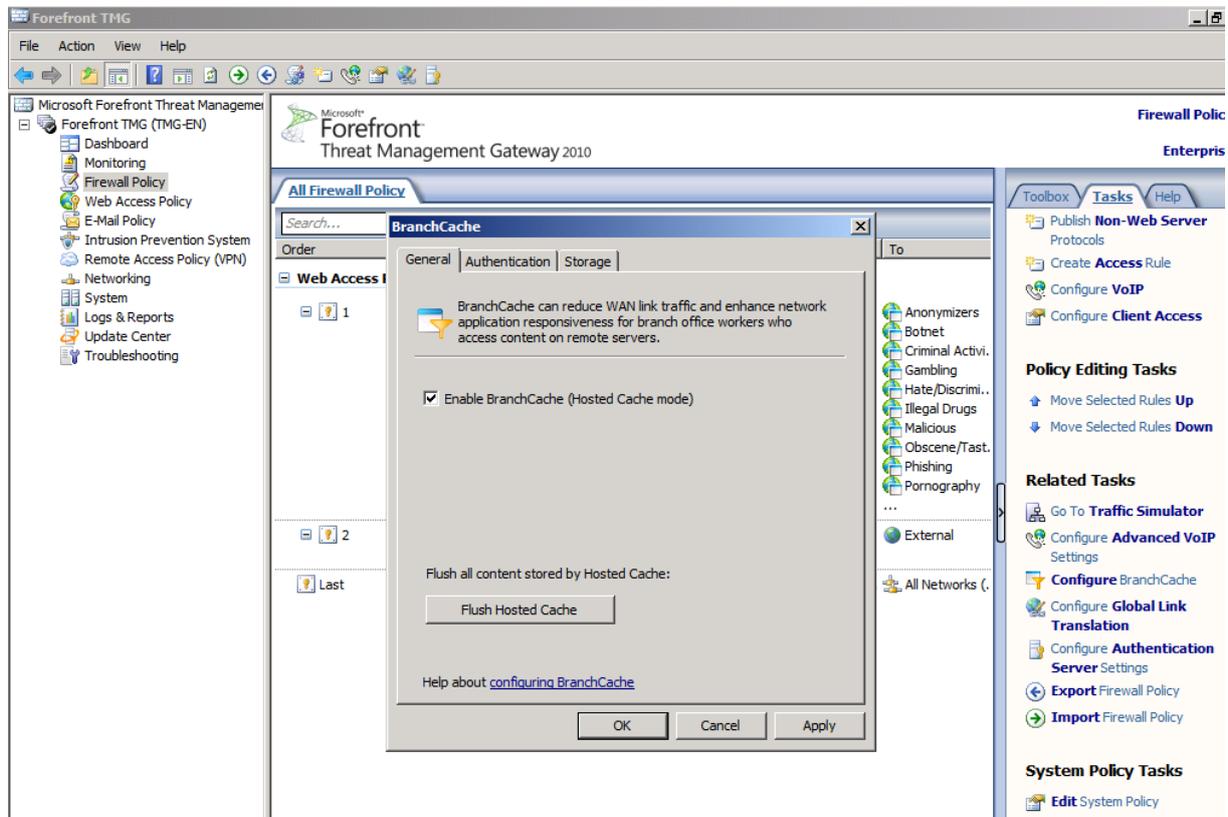


Figure 8: BranchCache in HostedMode

For getting BranchCache to work you must use a computer certificate. The BranchCache documentation on Microsoft Technet explains where you get the right certificate. You must enter the certificate in the BranchCache configuration in the TMG MMC.

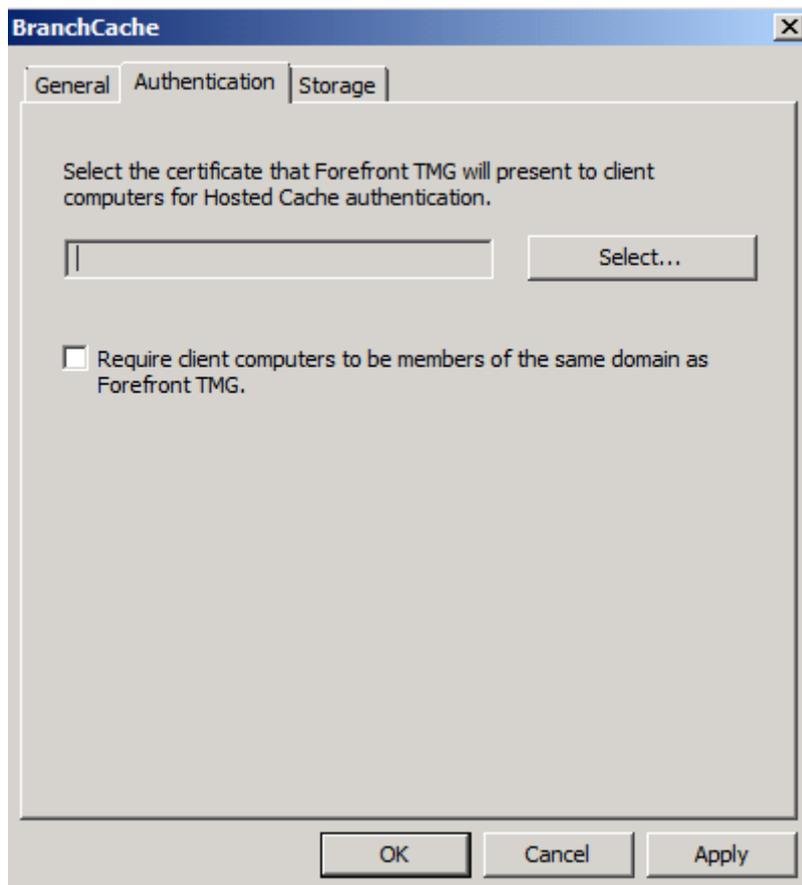


Figure 9: BranchCache and certificates

In the Storage configuration tab for BranchCache it is possible to configure the Default or custom folder for the cached file from BranchCache and it is also possible to specify the size of the Cache on the Harddisk.

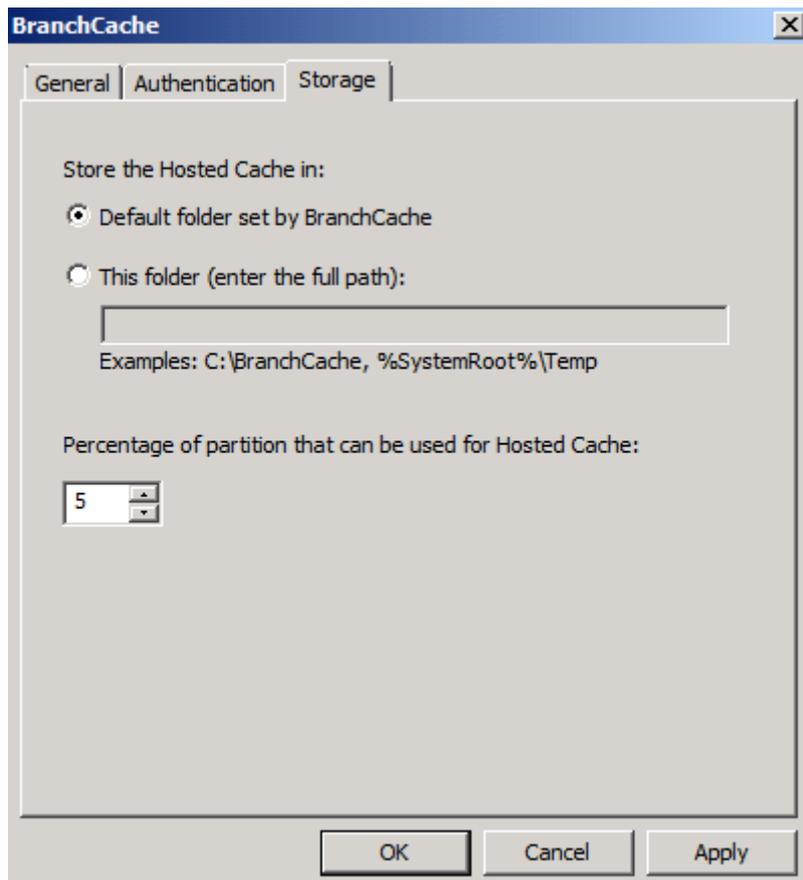


Figure 10: BranchCache Cache size and location

A new section in the Forefront TMG Dashboard gives you a detailed overview about the Cache efficiency of BranchCache.

| Cache Utilization | | | | | | | |
|-------------------|------------|-----------|------------|-----------|------------|-----------|----|
| Cache Type | Content... | Cache ... | Content... | Cache ... | Content... | Cache ... | D |
| Hosted Cache | 0,0 | 0,0% | 0,0 | 0,0% | 0,0 | 0,0% | 12 |
| Combined Cache | 0,0 | 0,0% | 0,0 | 0,0% | 0,0 | 0,0% | 12 |

Figure 11: BranchCache Cache Utilization

Other enhancements

New features included in the reports

Microsoft has added the “user override” and the BranchCache integration features into the existing report functionality of Forefront TMG.

Enterprise level override lists

In Forefront TMG RTM overriding URL categorization was done at array level only. With Forefront TMG SP1 it is possible to generate an override list at the enterprise level which will affect all TMG arrays of this Enterprise.

Block category available in error page redirect

When redirecting an error page to a web server the following tokens will be replaced by the appropriate values:

[DESTINATIONURL] – replaced with the denied URL.

[URLCATEGORYNAME] – replaced with denied URL Category name (localized to TMG language);

[URLCATEGORYID] – replaced with a number representing the denied URL Category Id.

[OVERRIDEGUID] – replaced w/ an array GUID which is to be used for user override purposes

These token may be used in the redirection URL (in a TMG access rule) in a following way:

[http://192.168.1.3/Default.aspx?OrigUrl=\[DESTINATIONURL\]&Category=\[URLCATEGORYNAME\]&CategoryId=\[URLCATEGORYID\]](http://192.168.1.3/Default.aspx?OrigUrl=[DESTINATIONURL]&Category=[URLCATEGORYNAME]&CategoryId=[URLCATEGORYID])

Support for SharePoint 2010

Forefront TMG SP1 adds support for publishing SharePoint 2010

Conclusion

In this article, I gave you an overview about the new functionalities and enhancements of Microsoft Forefront TMG which is expected to get final in July 2010. There are some improvements in SP1 compared to the RTM version of Forefront TMG but in my opinion there are a lot of possible enhancements so we should have a look at a hopefully upcoming SP2 for Forefront TMG.

Related links

New features in Forefront TMG SP1

<http://support.microsoft.com/kb/981324/>

Windows Server 2008 R2 and Windows 7 BranchCache

<http://www.microsoft.com/windowsserver2008/en/us/branch-cache.aspx>