

General information

Protocol Annex Document

This document is the technical specification of the protocol annex.

The scope of the document is described in the document itself.

Assemblies

The Assemblies folder is a collection of files which are needed by developers in order to integrate the protocol into a FDT2.1 Device Type Manager (DTM) or Frame Application.

The files provided in the Assemblies folder are intended to be used by developers within their development project.

The datatype assemblies contain the protocol specific data types which are described in the annex specification document. They are typically copied to a local folder of a development project and referenced by the .NET project.

The transformer assembly is required in order to connect FDT 2 DTMs with FDT 1.2.x DTMs. This assembly needs to be installed into the Global Assembly Cache (GAC). Please note that the protocol specific transformer assembly can be used by FDT2 enabled Frame Applications in order to provide interoperability between FDT2 and FDT 1.2.x.

However, whether a Frame Application actually supports such interoperability is product-specific. Please refer to Annex E of the FDT2.1 specification document for more information regarding the transformer assembly.

The manifest files are used by the Frame Application in order to dynamically load the protocol and transformer assemblies. Please refer to the FDT2 specification for more information and for their correct location on the system.

The Xml Documentation Comments files contain the Xml Documentation Comments of the protocol assemblies. It is recommended to copy them to the same location as the protocol assemblies. This has the effect that the Visual Studio IntelliSense feature provides richer information about the protocol specific data types. Please refer to the Microsoft Developer Network (MSDN) for more information regarding Xml Documentation Comments.

Merge Modules

The merge module shall be used to install the protocol annex runtime files on a target system.

It contains the protocol assemblies, transformer assemblies and protocol manifest files which are identical to the files in the folder “assemblies”.

It installs those files to their correct locations as described in the FDT2.1 specification.

Help Files

The help files folder contains API documentation of the protocol assemblies. This help is published in two different formats: MS Help 1 (.chm) and MS Help Viewer (.msha/.cab).

Please refer to the following sections for more information regarding the usage of those files.

Information on Online Help

Publication formats of the FDT2 Online Help

The FDT2 online help is published in two different formats:

- MS Help 1 (.chm): This format is supported by the Windows platform by default and does not need a particular viewer application – a simple doubleclick starts the help system.
- MS Help Viewer (.mshc/.msha): This format is generated for integration of the FDT2 help content into the Visual Studio 201x development environment.

Viewing MS Help 1 (.chm) content - troubleshooting

The MS Help 1 system initially had several security flaws which were fixed over the time by Microsoft, resulting in more and more restricted security settings on OS level that now may cause malfunction of .chm help files in certain situations. See Microsofts Security Bulletin [MS05-026](#) which references some issues and workarounds in the following knowledge base articles:

[892675](#) *Certain Web sites and HTML Help features may not work after you install security update 896358 or security update 890175*

Symptoms:

- HTML Help table of contents may not function
- certain HTML Help features, such as the Related Topics feature, may not work when the .chm file is opened from a remote location

[896054](#) *You cannot open remote content by using the InfoTech protocol after you install security update 896358, security update 840315, or Windows Server 2003 Service Pack 1.*

Symptoms:

- topic may not appear when you click a link
- when you try to use a Universal Naming Convention (UNC) path to open a .chm file that is on a network shared folder, topics in the .chm file may not appear.

General recommendation:

- Trying to view a help file from a **network share** can cause the content to be blocked. Copy the help file to your **local hard drive** and open it from there.

[896905](#) *After you install security update 896358, content that should be displayed in a different frame is displayed in the frame that contains the HTML Help ActiveX control.*

[905215](#) *Some URL schemes are ignored when you use the URL schemes in the parameters of an HTML Help ActiveX control after you install security update 896358*

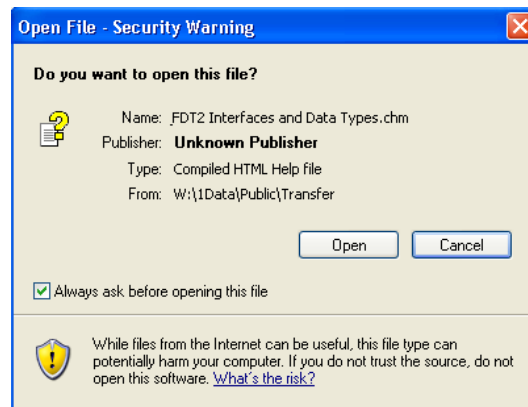
[902225](#) *You cannot open HTML Help files from Internet Explorer after you install security update 896358 or Windows Server 2003 Service Pack 1*

Symptoms:

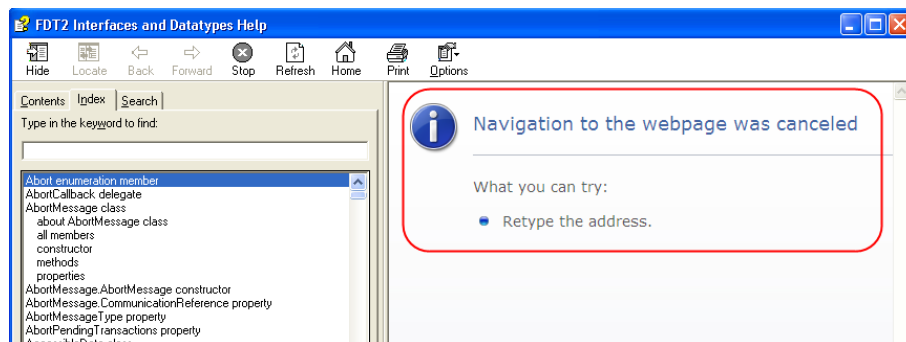
- .chm files downloaded from the internet may be blocked when you click **Open** in the **File Download** dialog box

Solution:

- Help files **downloaded from the web** may need to be **unblocked** before their content can be viewed:
 - If a security dialog appears, asking if you want to open the file, uncheck the "**Always ask before opening this file**" checkbox before clicking **Open** to avoid this dialog the next time you open the help file again.

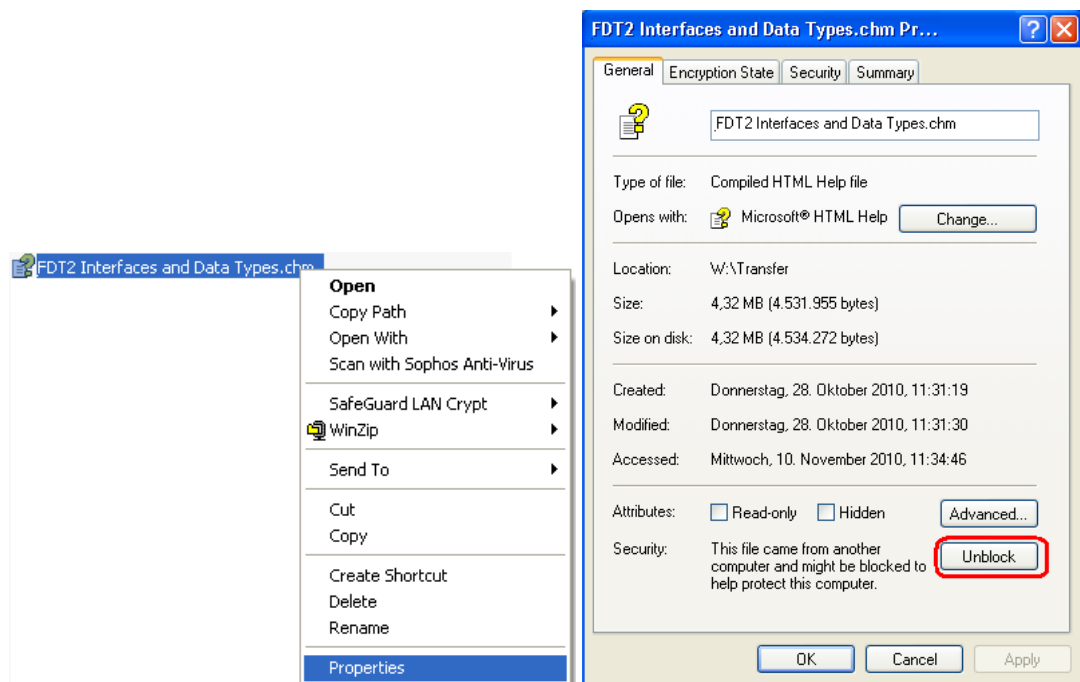


- If there is no information in the content pane after opening a help file, e.g.



the file is still blocked. Do the following:

1. open Windows Explorer, right-click the .chm file, select **Properties** and then click the **Unblock** button;




2. Apply the file property changes and open the help file again.

Installing and Viewing MS Help Viewer (.mshc) content

Visual Studio uses an independent online help system (MS Help Viewer, also known as MS Help 3) with an own help file format (MSHC – **M**icrosoft **H**elp **C**ontainer).

Visual Studio 2010 (MS Help Viewer 1.0/1.1)

Help Container are managed by the Help Library Manager:

- VS 2010 start menu: Visual Studio Tools ► Manage Help Settings or
- VS 2010 main menu: Help ► Manage Help Settings or
- Within Microsoft Visual Studio 2010 Documentation: Toolbar icon  (Help Library Manager)

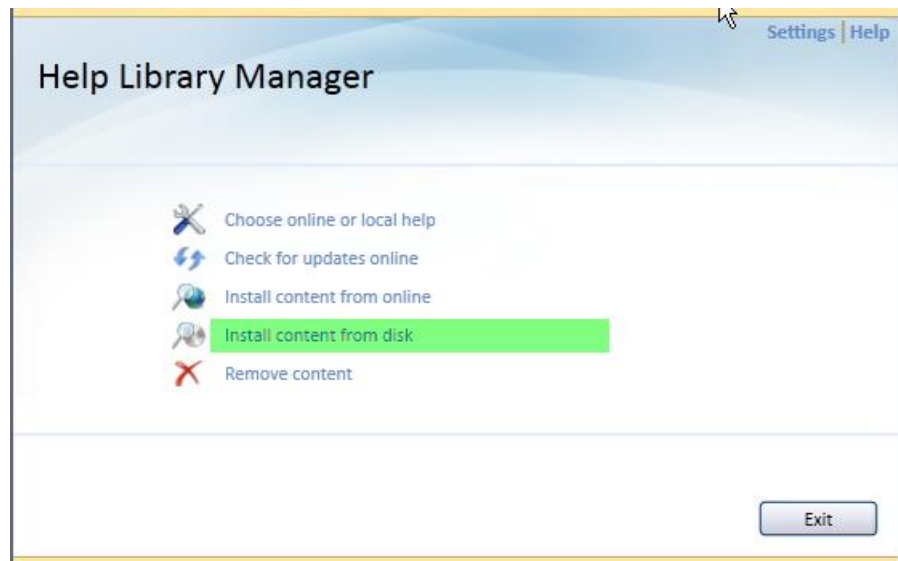
The Help Library Manager allows to install or remove help packages / books. A help package is a single .mshc file or a pair of .mshc and .mshi (index) file wrapped in a signed .cab file. A book is a group of packages installed together.

Installation of FDT2 help content

Step 1:

Select option

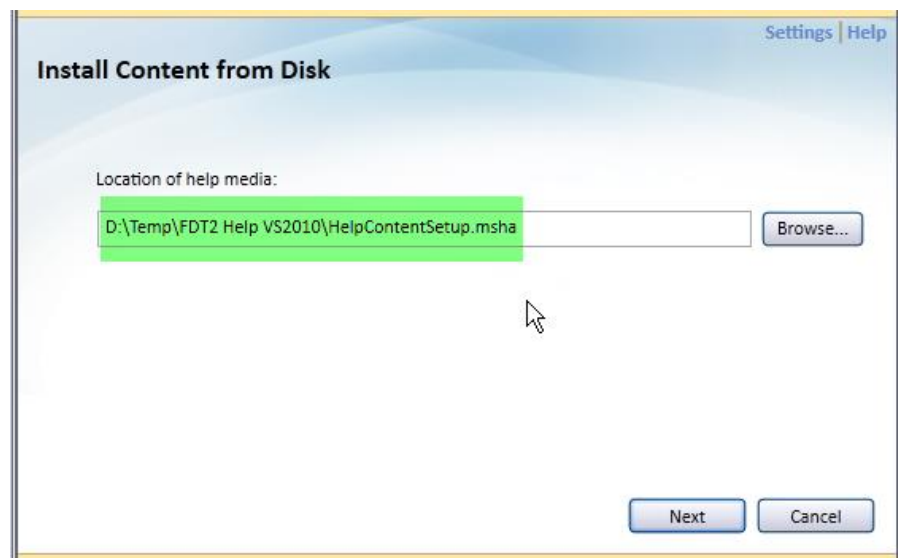
"Install content from disk"



Step 2:

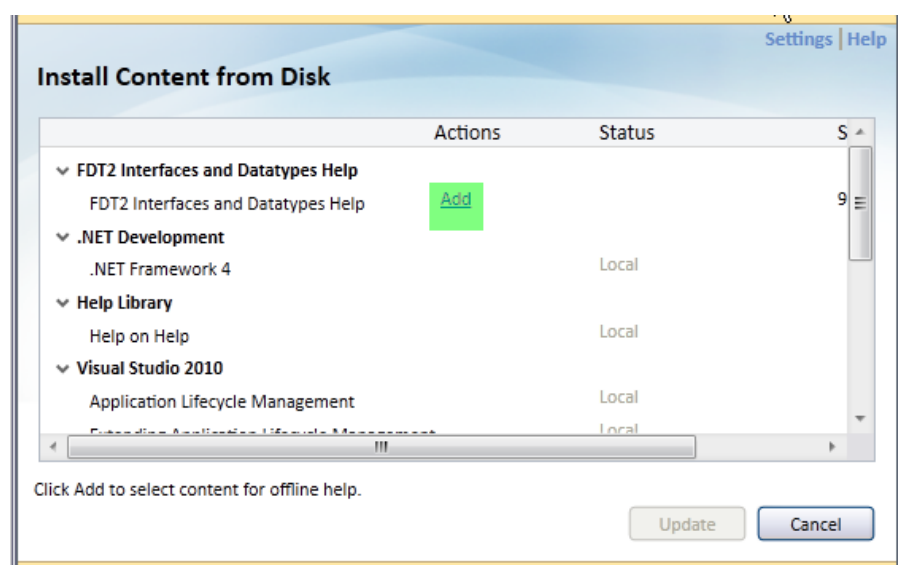
Browse to the folder with help files and **select the MS Help Asset file** (HelpContentSetup.msha):

Note: MS Help Viewer V1.0 / V1.1 only accepts the exact filename HelpContentSetup.msha !



Step 3:

Search for the new help collection entry, select **Add**, then push **Update** button

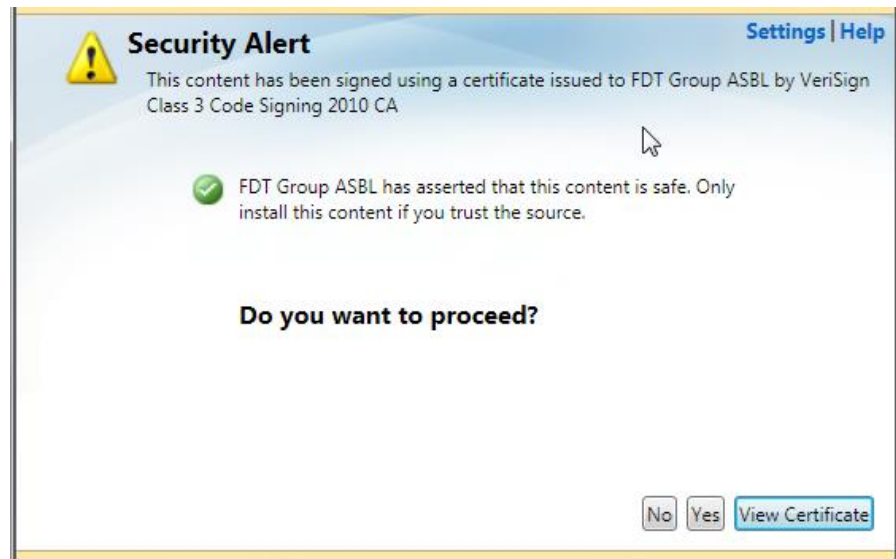


Step 4:

Confirm the security alert

(Screenshot shows alert for a help collection packaged as .cab file and digitally signed by the FDT Group AISBL.

Unsigned help collections show a slightly different alert asking for administrator rights to install the help collection)

**Visual Studio 2012 (MS Help Viewer 2.0)**

Help Container are managed within the Microsoft Help Viewer 2.0:

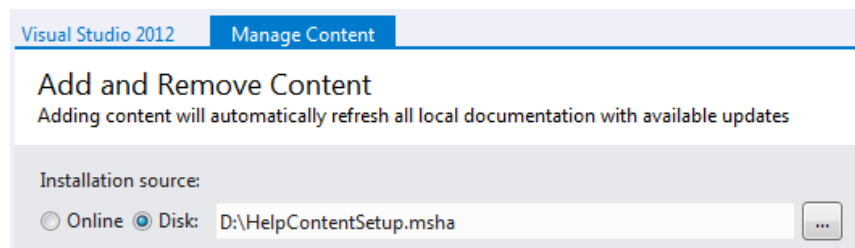
- VS2012 start menu: Microsoft Help Viewer, switch to Manage Content tab or
- VS2012 main menu: Help ► Add and Remove Help Content

Installation of FDT2 help content**Step 1:**

Select

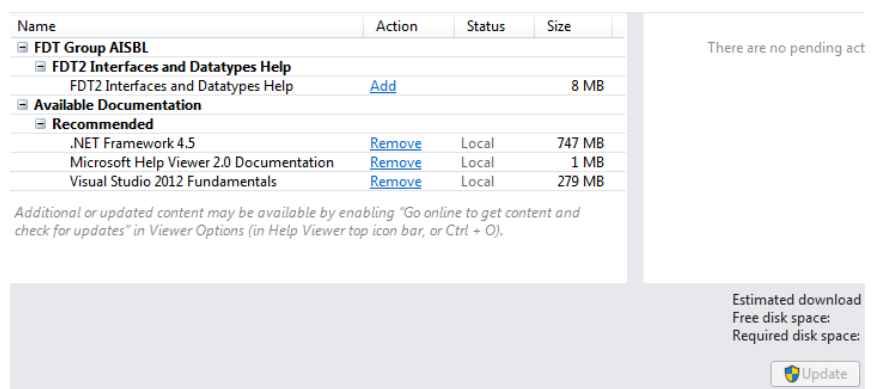
“Installation Source: Disk”

then set the **path** to the **MS Help asset file** (**HelpContentSetup.msha**):

**Step 2:**

Select **Add**,

then push **Update** button

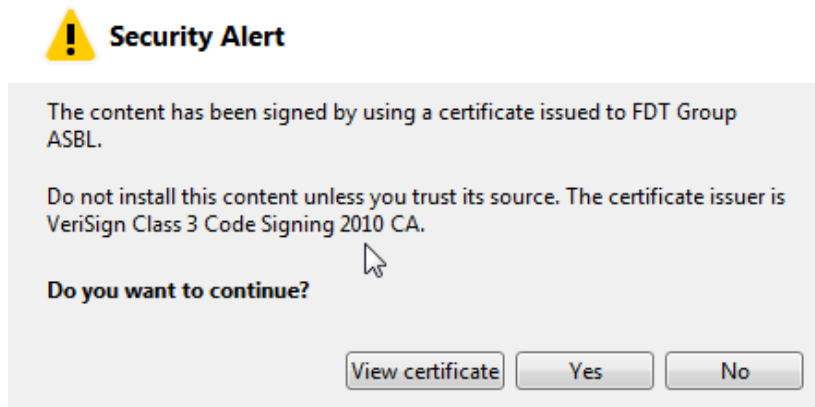


Step 3:

Confirm the security alert

(Screenshot shows alert for a help collection packaged as .cab file and digitally signed by the FDT Group AISBL.

Unsigned help collections show a slightly different alert asking for administrator rights to install the help collection)

**General recommendation for the installation of Help Viewer Content**

Trying to install a MS Help Viewer file from a **network share** can cause bad formatting of content and script errors. Copy the help file to your **local hard drive** and install the content from there.

Further Information

For further information please go to <http://www.fdtgroup.org/> or E-Mail to info@fdtgroup.org .