

Ansys GRANTA MI 2021 R1

GRANTA MI:Viewer Home Page Author Guide

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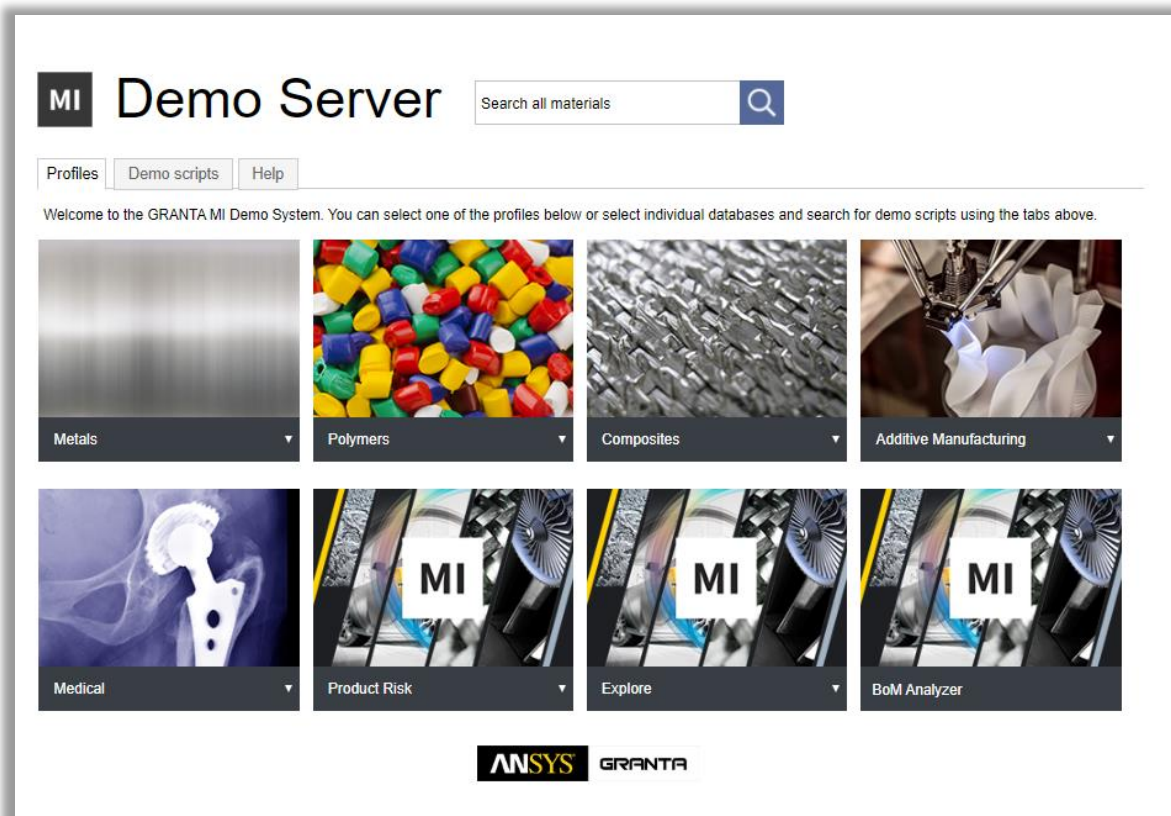
1 Home pages in MI:Viewer

Home pages in MI:Viewer can be used to guide users to the materials information they need, for example, by drawing together links to key resources and tools, by providing search fields for specific types of information, or by displaying text and graphics that help users to navigate and use the system. MI:Viewer home pages can be customized to the style and terminology of your enterprise, and personalized for particular user groups. For example, material engineers might have a link to a Search Template that allows them to quickly narrow down materials by type and classification, whereas designers could have an equivalent template that allows them to filter by specification.

Home pages can be defined for individual databases and Profiles, as well as for the whole MI:Viewer application.


1.1 Application (system) home page

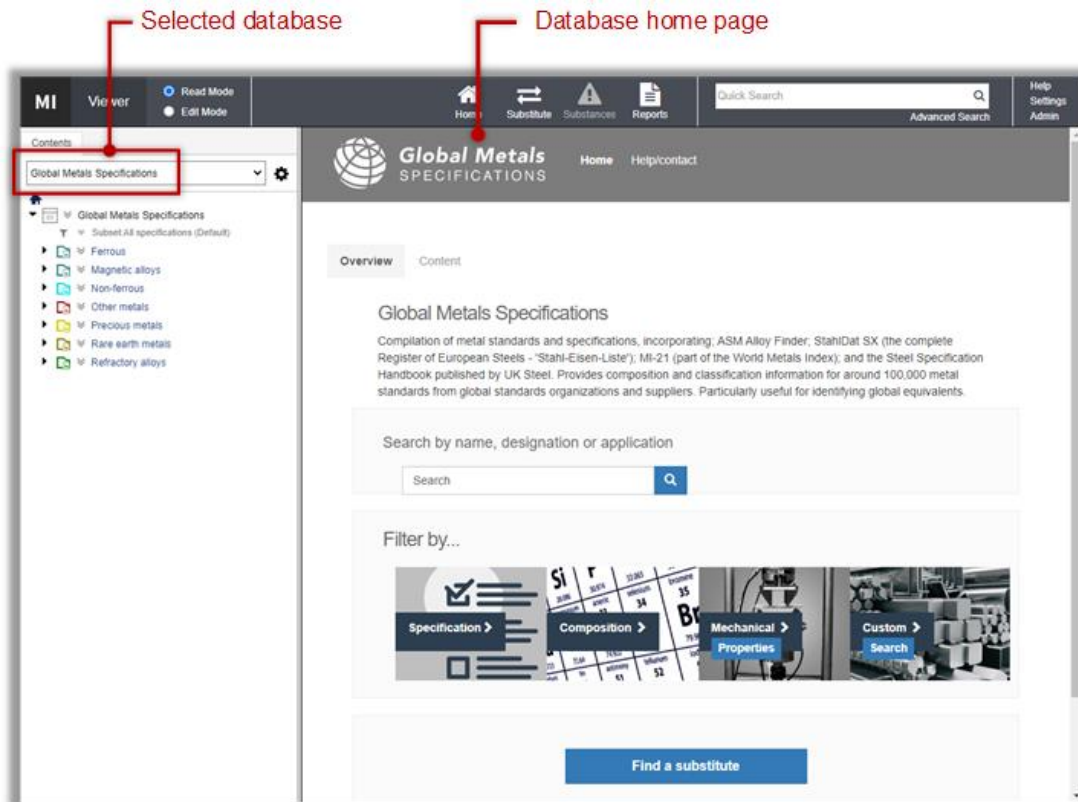
When a user first opens MI:Viewer, the **MI:Viewer application home page** (sometimes called the “system home page”) may be displayed. This will be visible to all users and typically fills the whole browser window. For example:



Read more: [Creating or updating the MI:Viewer application \(system\) home page](#)

1.2 Database home pages

When an MI:Viewer user selects a database  in the Contents tree, or a Profile containing a single database, the home page for that database is displayed in the main pane of the MI:Viewer window. Typically, this may include an overview of what's in the database, tools for searching or launching other apps, tutorials, and/or support information. For example:



Read more: [Creating or updating a Database Home Page](#)

1.3 Profile home pages

Profiles in GRANTA MI provide a way of grouping data from multiple databases and/or Tables into meaningful data sets for particular audiences, ensuring that application users only see data relevant to their task or role. In MI:Viewer, the selected Profile determines what databases and Tables application users can browse and search.

Profiles are defined in MI:Admin, and are typically used to filter data for specific 'personas' (e.g., design or simulation engineers), or for specific types of data (e.g., plastics, stainless steels) from multiple Tables or databases.

You can define home pages for a Profile, which can include the same elements as a database home page, such as information about the available data, search tools, tutorials, and so on.

Read more: [Creating or updating a Profile Home Page](#)

1.4 What's on a home page?

The process for developing home page content is the same for application, Profile, and database home pages. Home pages may include some or all of the following:

- Text and images, for example, descriptions of the available Profiles, databases, and Tables; your company logo
- Links to the application search page
- Links that perform searches for a specific term over specific Tables in the Profile
- Links to specific records in the database
- Links to external web pages
- Any other valid HTML, or ASPX elements such as form or script tags
- Links to additional content such as HTML or ASPX pages, PDF documents, or Zip files. Additional content referenced from home pages can be of any file type that can be served by IIS.

Section 2, *Writing a home page*, details the required format for links to datasheets, databases, Profiles and searches.

2 Writing a home page

Home pages for the MI:Viewer application and for Profiles, and databases must be created outside of GRANTA MI, in HTML or ASPX, using the editor of your choice. If the home page contains JavaScript, or needs to include any cross-database searches, it should be an ASPX file. Use a valid file name that is registered with IIS. In a default GRANTA MI installation, this is:

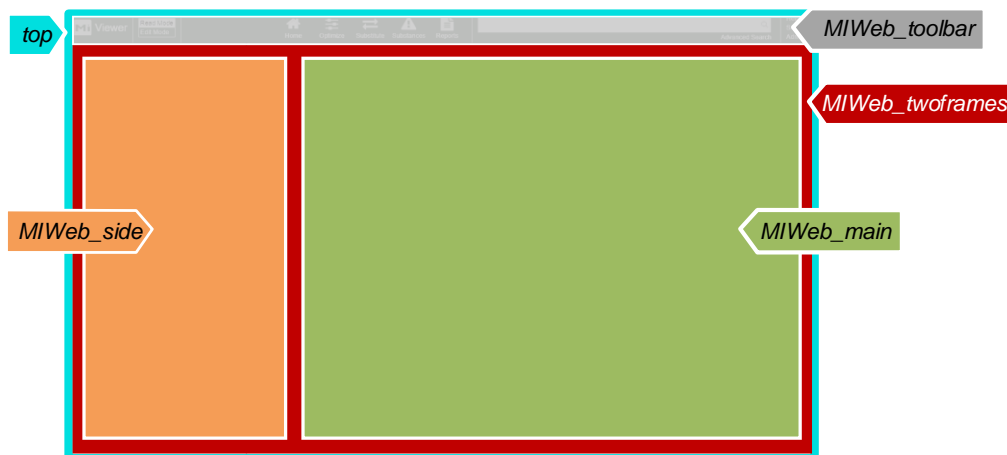
MI:Viewer application home page:	homepage.aspx
Database home page:	home.aspx, homepage.aspx, index.aspx, index.html, index.htm
Profile home page:	Typically index.aspx, but you can use any HTML or ASPX file (.html, .htm, .aspx).

The permitted files in IIS may have been restricted by your system administrator.

2.1 MI:Viewer application window

The MI:Viewer application window consists of the following frames:

- **top** is the top-level frame and is divided into two subframes: **MIWeb_toolbar** and **MIWeb_twoframes**.
- **MIWeb_twoframes** is divided in two further subframes: **MIWeb_side** and **MIWeb_main**.



When using link elements within in a home page, you can specify different frames for the link target:

- When linking to the MI:Viewer application home page, use `target="_top"` to display the result in the entire window.
- When linking to the search page, set `target="MIWeb_main"` (or leave target unset).
- To open a link in a new browser window, include `target="_blank"`. For example:

```
<a href="index.aspx?dbKey=MI_Training&history=133875" target="_blank">LINK</a>
```

When linking to content outside of MI:Viewer, then targeting `_top`, `_blank` or nothing may make sense, depending if you want the content to load in the full window, a new window or the main pane.

2.2 Identifying database objects

In many cases, you will need to know an object's identity (ID) or *name* in order to link to it from a home page. Every object in the database has a unique ID, a number that is specific to the database. You can find out the identity of database objects from the **Object Identities** page in MI:Viewer. On this page, you can discover IDs for

All of the available Profiles in the system:

Object Identities	
▼ All Profile Keys	
Name	Key
Everything (admin and grant users only)	everything
MaterialUniverse	MI_MaterialUniverse_5.40.0m_Dec2016
MI:Metals Template	MI_Metals_Template_2.3.1m
MI:Training	MI_Training_Master

The Search Masks, Tables, and Search Templates in each database:

▼ Search Masks		
Name	Identity	GUID
Search for substances	5	2acc49ba-b41d-4e30-8790-f881ba1b67e7
Universal Data	3	5332bc04-84c6-43f9-8f68-a8029b3d674d

▼ Tables		
▼ All tables summary		
Name	Identity	GUID
MaterialUniverse	4	0000dd92-0011-4fff-8fff-0000ffff0000
ProcessUniverse	11	00003248-0011-4fff-8fff-0000ffff0000
Design Data	8	0000b5e2-0011-4fff-8fff-0000ffff0000
Metals Pedigree	53	ad27baf0-42e9-4136-bc96-9dbbf116e265

▼ Search Templates		
Name	Identity	GUID
Search All bulk materials	2	e8e349e2-80bd-4d9e-89fd-0376e04cda65
Search Polymers	3	6db8a782-59fb-4ed8-9064-5904d951561f

Note: Search Templates and Search Masks may be identified by their *name* instead of their ID, using custom controls to pull the ID directly from the server; see Section 2.6.6.

To discover an object ID:

1. Log in to MI:Viewer and select the database of interest.
2. To display the **Object Identities** page, click **Admin** in the MI:Viewer toolbar then, under **Utilities**, click **Object identities**.

Users without administrative privileges can open the Object Identities page directly from a browser, in the address bar, type *objectIdentities.aspx* after the */mi/* part of the address and press return, for example: `http://HOSTNAME/mi/objectIdentities.aspx`

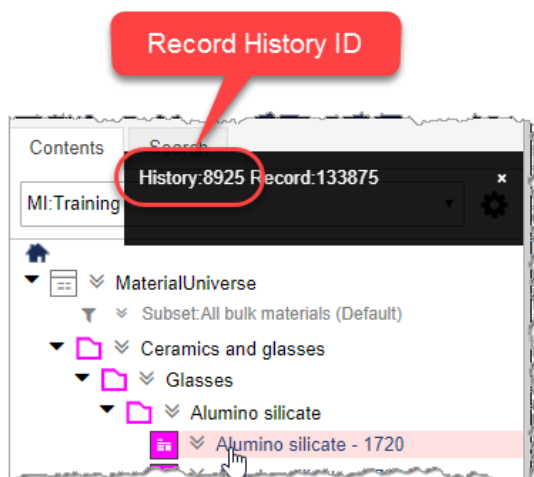
Users will only be able to see ID information for Table objects they have permission to see.

3. Select the database from the **Showing information about** list.
4. Expand the relevant headings to view ID information for objects in that database.
You will only be able to see ID information for Table objects that you have permission to see with your current login privileges. To ensure that all Tables are visible, you need to log in to MI:Viewer as a user with administrative privileges for the GRANTA MI system, and with Database Admin privileges for any databases with database-level security configured.
5. To go back to the application, click your browser's Back button or enter the default address for MI:Viewer in the address bar and press return, e.g. `http://HOSTNAME/mi`

2.3 Identifying records

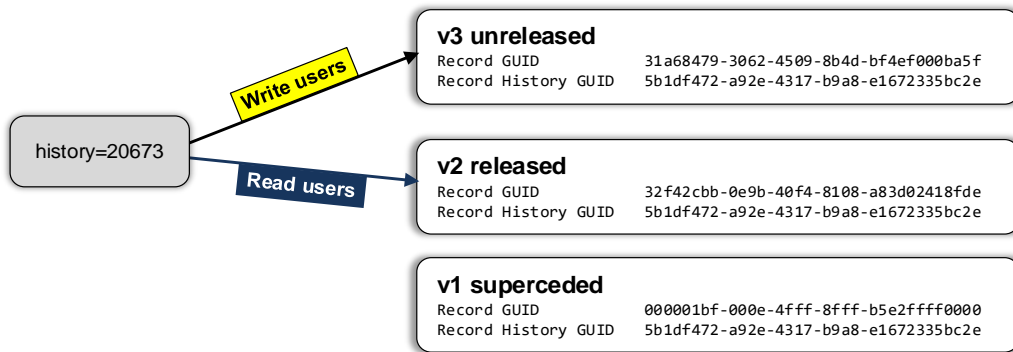
2.3.1 Record History ID (history)

One way of identifying records in a database is via the **record History ID**, which can be shown in MI:Viewer by holding **Ctrl** and clicking on the record in the browse tree:



In version-controlled Tables, the record History ID returns the latest version of the record that the user is permitted to see. If an unreleased version of the record exists:

- In Write mode, the unreleased record will be returned;
- In Read mode, the released record will be returned.

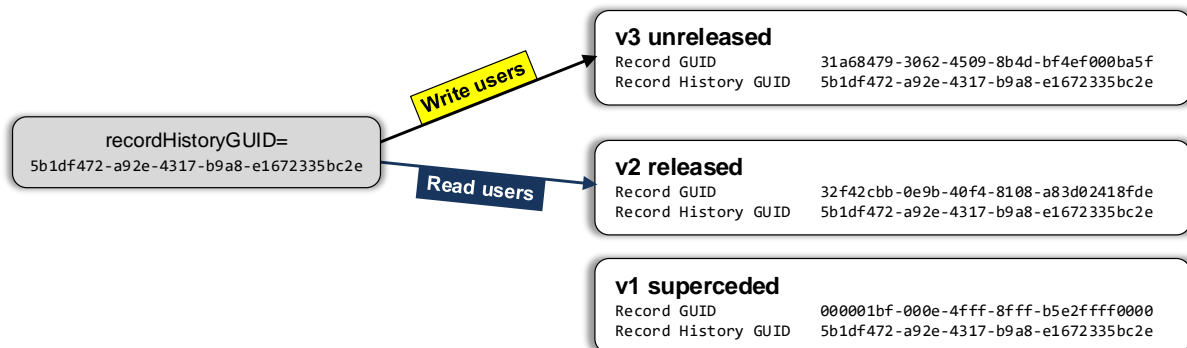


2.3.2 Record History GUID (recordHistoryGuid)

The **Record History GUID** (RHGUID) uniquely identifies a record. In version-controlled Tables, where multiple record versions exist, all versions of the record have the same Record History GUID.

The Record History GUID can be used in home page links and URLs to return the latest version of the record that the user is permitted to see. If the latest version is unreleased:

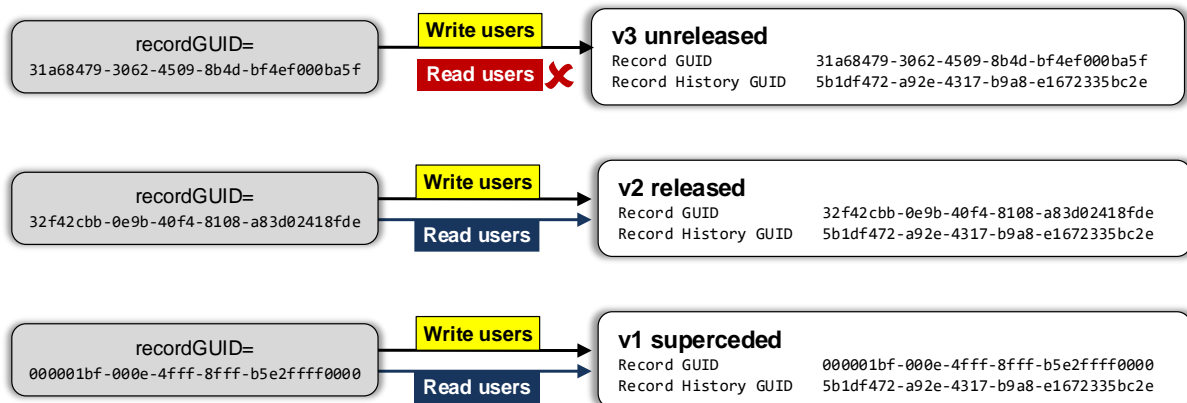
- In Write mode, the unreleased record will be returned;
- In Read mode, the released record will be returned.



2.3.3 Record GUID (recordGuid)

Where multiple versions of a record exist, the **Record GUID** is used to uniquely identify a record version.

The Record GUID can be used in home page links and URLs to return a specific record version, for example, a *Superseded* or *Withdrawn* version. If the requested version is unreleased, the record **will not be returned** in Read mode.



2.4 Linking to records

A home page may include links to records using any of these record identifiers:

- Record history ID - **history**
- Record history GUID - **recordHistoryGUID**
- Record GUID (RGUID) - **recordGUID**

Example 1—history

In this database home page link, the record history ID (**history**) is used to open the datasheet for a steel record in the MI:Training database:

```
<a href="../../../datasheet.aspx?history=11331">Maraging steel</a>
```

In a Profile home page, the database key is required:

```
<a href="../../../datasheet.aspx?dbkey=MI_Training&history=11331">Maraging steel</a>
```

Example 2—recordGUID

In this link, the record GUID (**recordGUID**) is used to open the datasheet for a specific version (v1 Superseded) of a design data record in the MI:Training database:

```
<a href="../../../datasheet.aspx?dbkey=MI_Training&recordGuid=000001bf-000e-4fff-8fff-b5e2ffff0000">Plate [v1]</a>
```

Example 3—recordHistoryGUID

In this link, the record history GUID (**recordHistoryGuid**) is used to open the latest version of the same design data record:

```
<a href="../../../index.aspx?recordHistoryGuid=5b1df472-a92e-4317-b9a8-e1672335bc2e" target="top">AMS 6520</a>
```

2.5 Linking to Profiles

To create a link to a specific Profile from a home page, you can use the **Profile key**. For example:

```
<a href="../../../index.aspx?profileKey=MI_Product_Risk_5.46.1m" target="_top">Product Risk Data</a>
```

You can find a list of the Profile keys for all of the available Profiles on the Object Identities page in MI:Viewer; see Section 2.2 on page 8.

2.6 Search links

A home page can include links which, when clicked, open the MI:Viewer **Search** page and display the results of a search for a word or words. The search can be performed:

- over all of the Tables in a particular Profile, or just in a specific Table within a Profile,
- using a specified Search Template,
- using a specified Search Mask.

While it is possible to search over an individual database using the database key, it is preferable to create a Profile containing a single database and to search over this instead, to avoid issues with maintaining the links if the database key changes (e.g. when the database is replaced or superseded).

Link URLs that include search terms can also be generated from the **Switchboard** page in MI:Viewer; see [Appendix A](#).

An example of a simple database home page that includes some different search tools is given in [Appendix B](#).

2.6.1 Links that open the Search page

To include a link that opens the MI:Viewer Search page when clicked, you can link directly to the search page as follows:

```
<a href="../../../searchPage.aspx">Search for materials</a>
```

2.6.2 Links that perform a search in a specific Profile

To create a link that displays the results of a search for a word or words in a specific Profile, you can include the **Profile key** and one or more **search terms**, separated by '+'.

```
<a href="index.aspx?profileKey=profilekey&search=term1+term2">linktext</a>
```

You can find the Profile key on the Object Identities page in MI:Viewer; see Section 2.2 on page 8.

Profile search link example

This link will open the Search page and display the results of a search in the *MI:Training* Profile for the words “ABS” and “molding”:

```
<a href="../../../index.aspx?profileKey=MI_Training&search=ABS+molding"
target="_top">Search for ABS and molding</a>
```

2.6.3 Links that perform a search in a specific Table

To include a link that displays the results of a search for text in a specific Table, include the database key (*dbkey*), Profile key (*profilekey*), the list of terms to search for, separated by '+', and the Table ID (*tableID*).

```
profileKey=profilekey&table=tableID&search=term1+term2
```

You can find the Profile key and Table ID on the Object Identities page in MI:Viewer; see Section 2.2 on page 8.

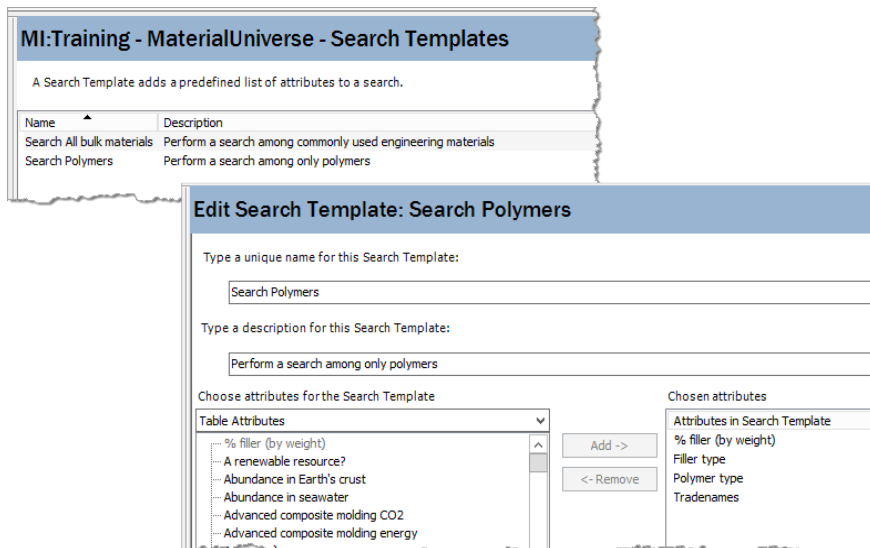
Table search link example

To display the results of a search for “molding” in the *ProcessUniverse* Table (MI:Training database):

```
<a href="../../../index.aspx?search=molding&table=11" target="_top">Search example</a>
```

2.6.4 Links that use a Search Template

Search templates provide MI:Viewer users with pre-defined search definitions that specify the set of Attribute search criteria; users can then simply enter the required values and perform the search. Search templates are defined in MI:Admin and are specific to the database Table in which they are defined.



To include a link that opens the Search page with a specified Search Template pre-loaded, include the Search Template **ID** in the link: `searchtemplate=ID`

You can find the Profile key and Search Template ID on the **Object Identities** page in MI:Viewer; see Section 2.2 on page 8.

Search template link example

In the MI:Training database, to open the Search page ready to perform a search using the “Search Polymers” Search Template (= Search Template ID **3**):

```
<tr>
  <td>SEARCH Polymers using a Search Template</td>
  <td><a href="../../index.aspx?searchtemplate=3" target="_top"></a></td>
</tr>
```

Sample Homepage Tools

SEARCH using the 'Universe' search mask

Search

SEARCH Polymers using a Search Template

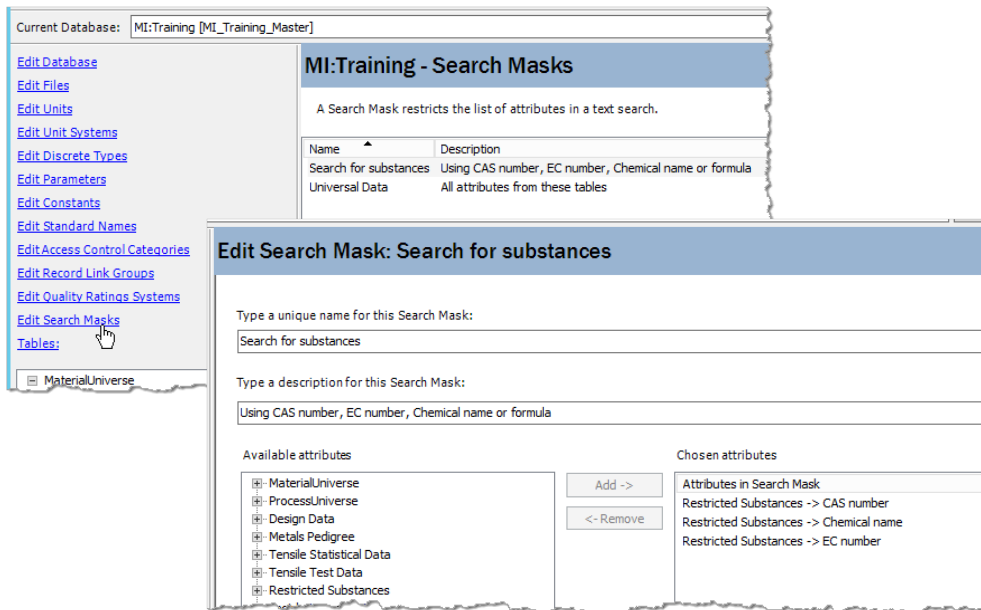
Search

2.6.5 Links that use a Search Mask

Search masks are used in MI:Viewer to limit the scope of a text search to a specified set of text/Discrete Attributes. To include a link that displays the results of a search using specified Search Mask, include the Search Mask name in the link as follows:

```
href="searchResults.aspx?search=<term1+term2>&searchmask=<ID>"
```

where *ID* is the identity of the Search Mask.



Search mask link example

In this extract from a home page, a form provides a search box on the home page where the 'Search for substances' Search Mask (Search Mask ID = 5) is used to search the *CAS number*, *Chemical name*, and *EC number* Attributes in the MI:Training database:

```
<table>
  <tr>
    <td valign="middle">Search for substances</td></tr>
  <tr>
    <form action="../../searchResults.aspx" method="get" target="MIWeb_side"
    autocomplete="on">
      <td>
        <input type="text" name="search" id="search1" class="search-box"
        style="width:380px; height:26px">
      </td>
      <td valign="left">
        <input type="hidden" name="dbkey" value="MI_Training">
        <input type="hidden" name="searchmask" value="5">
        <input type="image" src="search.png" alt="Search" name="submit"
        class="image" style="margin:-10px 5px">
      </td>
    </form>
  </tr>
</table>
```



You can find the Profile key and Search Mask ID on the **Object Identities** page in MI:Viewer; see Section 2.2 on page 8.

2.6.6 Identifying Search Masks & Search Templates by name instead of ID

Search templates and Search Masks may be identified by their *name* instead of their ID, using custom controls `SearchTemplateIdentity` or `SearchMaskIdentity` to pull the ID directly from the server. These custom controls are compiled into the MI:Viewer application.

To use them on an ASPX home page:

- For the page to have access to the custom control, you must use the `<%@ Register %>` directive at the top of the page, specifying a tag prefix, the assembly file, and the namespace where the control class is located. For example:

```
<%@ Register TagPrefix="info" Namespace="Granta.MI.Web.Homepages.Public"
Assembly="Granta.MIWeb" %>
```

- Once you have registered the controls, you can include them in a control tag within search links on the page as follows:
 - For a Search Template, you must specify the tag prefix and custom control, and also the names of the Search Template and the Table where the template is defined:

```
searchtemplate=<info:SearchTemplateIdentity runat='server' TableName='NAME'
SearchTemplateName='NAME' /> ...
```

- For a Search Mask, you must specify the tag prefix and custom control, and the Search Mask name:

```
searchmask=<info:SearchMaskIdentity runat='server' SearchMaskName='NAME' /> ...
```

Examples

Example with named Search Template

```
<a href="../../../index.aspx?dbkey=MI_Test&searchtemplate=<info:SearchTemplateIdentity
runat='server' TableName='MaterialUniverse' SearchTemplateName='Search Polymers' />"
target="MIWeb_Side">Click to find polymers</a>
```

Example with a named Search Mask

```
<a href="../../../searchResults.aspx?
dbkey=MI_Test&search=tempered+steel&searchmask=
<info:SearchMaskIdentity runat='server' SearchMaskName='Aerospace Data' />"
target="MIWeb_Side">Click to find tempered steel</a>
```


2.7 *Other elements on home pages*

You can include any other valid HTML or ASPX elements on home pages, such as form or script tags. Note that your company browser may not allow some functionality for security reasons.

3 Creating or updating a Profile Home Page

Defining a Profile home page is optional. A Profile home page may be displayed after a user selects a Profile in the MI:Viewer Contents tab:

- If a home page is defined for a Profile, it will be displayed when the Profile is selected.
- If no home page is defined for a Profile, and the Profile contains more than one database, MI:Viewer will display a default home page for the Profile.
- If no home page is defined for a Profile, and the Profile only contains Tables from one database, MI:Viewer will display the home page for the database.

The whole Profile home page is visible to all users who have permission to view the Profile. It is *not* possible to restrict display of parts of the home page dependent on a user's permissions. Therefore, it is possible that a user may see a link to a record that they do not have permission to open.

Summary of steps to create or modify custom Profile home pages

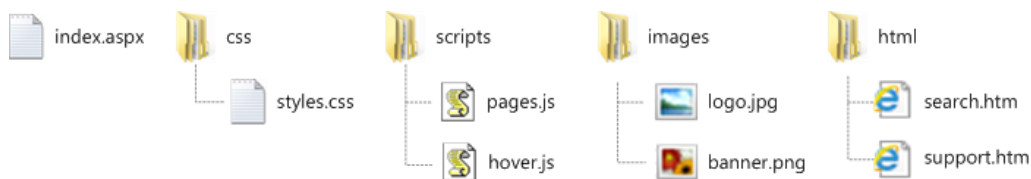
1. Create or edit the home page file and any associated files; see [3.1](#).
2. In MI:Admin, add the home page files to a custom Profile using the Profiles tool; see [3.2](#).
3. On the MI:Viewer Admin page, refresh the Profile home page to make it available to users; see [3.3](#).

3.1 Create or modify the home page files

A Profile home page is an HTML or ASPX file which may be created or modified using the editor of your choice. See Section 2, *Writing a home page*, for information about the home page content, and how to specify links to databases, datasheets, other Profiles, and searches.

The Profile home page must be saved as a valid file name registered with IIS, for example *.html, *.aspx, or *.htm. Note that the allowed files in IIS may have been restricted by your system administrator.

The home page file and any additional content, such as CSS files, scripts, HTML files, images, or PDF documents, can be organized into a folder structure, with the home page at the root level. The relative path used for links to these files from the home page file should be set accordingly.



3.2 Add the home page files to a custom Profile

When you have finished editing the home page files, you need to add them to the Profile in the MI:Admin **Profiles** tool.

1. Open the MI:Admin application and click **Profiles** in the toolbar.
2. In the Profiles tool, select the correct Profile and then click **Set Profile Home Page**.
3. Select **Use Custom Profile Home Page** and then click **Upload Profile Home Page**.
4. In the Profile Home Page Browser, click the **Import** button and then:
 - To import a whole folder and all of its contents, click **Import Folder** and select the folder.
 - To import all of the contents of a folder but not the folder itself, click **Import Contents**, locate and select the folder containing the files you want, then click **OK**.
 - To import selected files, click **Import Files**, locate and select the files, then click **Open**.
5. Close the Profile Home Page Browser window.
6. Back in the **Set Profile Home Page** dialog, select the newly-added home page from the **Profile home page** list and then click **Save** to save your changes to the custom Profile.

3.3 Refresh the home pages in MI:Viewer

After updated database or Profile home page files have been imported to the database, they must be copied to the MI:Viewer web application to 'publish' them to MI:Viewer users. This is done from within MI:Viewer as follows:

1. Open MI:Viewer and log in as a user with administrator privileges for the GRANTA MI system.
2. On the General tab, under *Home page files*, select all the databases and/or Profiles that have modified home pages, and click **Refresh home pages**.

The home page files are copied into a subfolder in the MI:Viewer installation folder, typically:

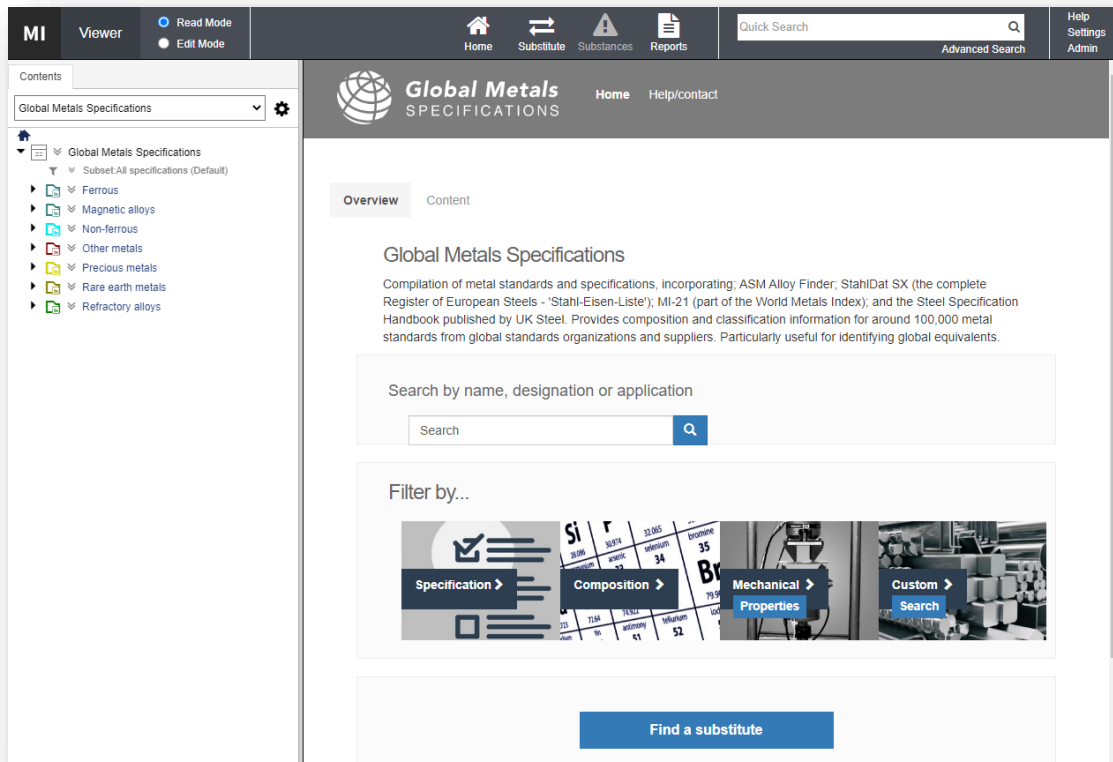
C:\inetpub\wwwroot\mi\homepagefiles*<database or profile key>*

The structure of the files and folders that define the home page will be reproduced in this subfolder, which is published as a standard web folder.

Note that any files that were previously in the homepagefiles subfolders will be deleted when the new files are copied in.

4 Creating or updating a Database Home Page

A database home page is displayed when a user selects a database, or a Profile that contains only one database. For example, this Global Metals Specifications home page includes information about the data, and some search/filter tools:



The whole home page is visible to all users who have permission to view the database. It is *not* possible to restrict display of parts of the home page dependent on a user's permissions. Therefore, it is possible that a user may see a link to a record that they do not have permission to display.

Summary of steps to create or modify a database home page

1. Create or edit the home page file, and any associated files; see 4.1.
2. In MI:Admin, add the home page files to the database Files in the Schema tool; see 4.2.
3. On the MI:Viewer Admin page, refresh the database home page to make it available to users; see 4.3.

4.1 Create or modify the home page files

A database home page is an HTML or ASPX file which may be created or modified using the editor of your choice. See Section 2, [Writing a home page](#), for information about the home page content, and how to specify links to databases, datasheets, other Profiles, and searches.

The database home page must be saved as a valid file name registered with IIS, for example home.aspx, homepage.aspx, index.aspx, index.html, index.htm.

Note that your Windows system administrator may have locked down the files allowed in IIS.

The home page file and any additional content, such as CSS files, scripts, HTML files, and images, can be organized into a directory structure with the home page at the root level. The relative path used for links to these files from the home page file should be set accordingly. In this example, index.html is the home page:



When you have finished editing the home page file and any additional content, you need to add them to the relevant database using the MI:Admin Schema tool.

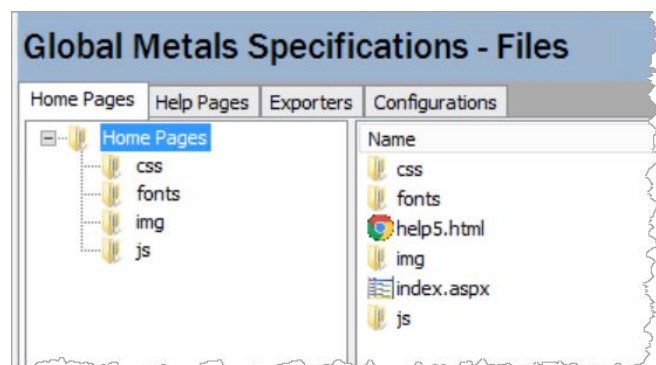
An example of a simple database home page that includes some different search tools is given in [Appendix B](#).

4.2 Add the home page files to the database

Database home page files must be uploaded and added to the relevant database using the MI:Admin Schema tool.

The database home page file must be stored at the top level of the Home Pages folder in MI:Admin. Other resource files linked to the home page, such as images, HTML files, CSS files and documents, can be stored at the same level or in subfolders.

In this example, the database home page is index.aspx, and other resources have been placed into subfolders.



Procedure

1. Open the MI:Admin application and click **Schema** in the toolbar.
2. In the Schema tool, select the correct database from the Current Database list, and click **Edit Files** in the left pane.
3. On the Home Pages tab, select the folder where you wish to place the new files and:
 - Click **Import Files** to import selected files.
 - Click **Import Folder** to import a folder and all of its contents.
 - Click **Import Contents** to import just the contents of a folder without importing the folder.
4. Browse to locate the folder or file(s) to import, then click **OK**.
5. Next, the files must be copied into to the MI:Viewer web application; see [4.3](#).

4.3 Refresh the home pages in MI:Viewer

After updated database or Profile home page files have been imported to the database, they must be copied to the MI:Viewer web application to ‘publish’ them to MI:Viewer users. This is done from within MI:Viewer as follows:

1. Open MI:Viewer and log in as a user with administrator privileges for the GRANTA MI system.
2. On the General tab, under *Home page files*, select all the databases and/or Profiles that have modified home pages, and click **Refresh home pages**.

The home page files are copied into a subfolder in the MI:Viewer installation folder, typically:

C:\inetpub\wwwroot\mi\homepagefiles*<database or profile key>*

The structure of the files and folders that define the home page will be reproduced in this subfolder, which is published as a standard web folder.

Note that any files that were previously in the homepagefiles subfolders will be deleted when the new files are copied in.

5 Creating or updating the MI:Viewer application (system) home page

The MI:Viewer application home page (also referred to as the “system home page”) defines the first page displayed to a user after they have logged in to MI:Viewer, typically filling the whole browser window. It may include text, images, search tools, and/or links to Profiles and databases. An MI:Viewer application home page is optional.

The whole MI:Viewer application home page is visible to all users who have permission to log in to MI:Viewer. It is not possible to restrict display of parts of the home page dependent on a user’s permissions. Therefore, it is possible that users may see links to Profiles or databases they cannot access.

Summary of steps to create or modify an MI:Viewer application home page

1. Create or edit the MI:Viewer application home page and any associated files; see 5.1.
2. Copy these files into the MI:Viewer application systemhomepage folder; see 5.2.

5.1 Create or modify the home page files

The MI:Viewer application home page is an HTML or ASPX file which may be created or modified using the editor of your choice; see Section 2, *Writing a home page*.

The MI:Viewer application home page must be saved as a valid file name registered with IIS, for example, homepage.aspx or homepage.htm. In a default installation of MI:Viewer, the application home page file is homepage.aspx.

You can organize any additional content used by the MI:Viewer application home page, such as CSS files, scripts, HTML files, or images, into a folder structure. The relative path used for links to these files from the home page file should be set accordingly.

5.2 Copy the home page files into the correct folder

To make them available in MI:Viewer, simply copy the new files and folders into the correct location within the MI:Viewer web application root as follows:

1. Copy the home page file homepage.aspx or homepage.htm file into the MI:Viewer installation root folder; for example:

C:\inetpub\wwwroot\mi\homepage.aspx

2. Place any additional files/folders referenced from the home page into in a subfolder named systemhomepage under the MI:Viewer application root; for example:

C:\inetpub\wwwroot\mi\systemhomepage

No further steps are required: in a default installation, GRANTA MI will automatically detect the presence of the MI:Viewer application home page named homepage.aspx located in the application root folder.

Note that, if you wish to reuse any GRANTA MI images in your MI:Viewer application home page, you should copy them from the system images folder (C:\inetpub\wwwroot\mi\images) into the systemhomepage folder, as GRANTA MI resources may be subject to change in subsequent releases.

6 MI:Viewer URLs

It is possible to construct a URL to link to MI:Viewer from a web page that is outside the application. This section provides information on how to do this, and how you can specify certain MI:Viewer tools.

Users may still be required to log in to MI:Viewer, depending on the setup of GRANTA MI and of the controls on the external page.

6.1.1 URL for a specific datasheet

Datasheet and index URL links can identify a record by its Record History ID, Record GUID (RGUID) or Record History GUID (RHGUID):

Record identifier	URL parameter
Record History ID	history
Record history GUID (RHGUID)	recordHistoryGuid
Record GUID (RGUID)	recordGuid

In a version-controlled record, the Record History GUID will return the latest version of the record, while the Record GUID can be used to return a specific record version. See also Section 2.3, *Identifying records* for more information about behavior of these identifiers with version-controlled records in Read Mode and Edit Mode.

Index URL examples

Include the MI:Viewer index (index.aspx) and a record identifier in the URL for a link that opens the MI:Viewer application home page and loads the record datasheet. For example:

```
http://acmeserver/mi/index.aspx?history=11331
```

```
http://acmeserver/mi/index.aspx?recordHistoryGuid=d0237d48-ddd2-4916-b24c-86ba51f25b52
```

```
http://acmeserver/mi/index.aspx?recordGuid=0000098c-000e-4fff-8fff-dd92ffff0000
```

Datasheet URL examples

For a link that opens just the datasheet in the browser (no application toolbar, Browse tree, or search tools), include datasheet.aspx in the URL instead of index.aspx; in addition to the record identifier, you must also specify the database key where the record is located. For example:

```
http acmeserver/mi/datasheet.aspx?history=11331&dbkey=MI_Training
```

```
http://acmeserver/mi/datasheet.aspx?dbkey=MI_Training&recordHistoryGuid=d0237d48-ddd2-4916-b24c-86ba51f25b52
```

```
http://acmeserver/mi/datasheet.aspx?recordGuid=0000098c-000e-4fff-8fff-dd92ffff0000&dbkey=MI_Training
```

Note that, on following a datasheet URL, the user will be immediately redirected to the equivalent URL with the record history id (if recordHistoryGuid is used) or the record id (if recordGuid is used). For example, this URL with a Record History GUID:

```
http://acmeserver/mi/datasheet.aspx?dbkey=MI_Training&recordHistoryGuid=d0237d48-ddd2-4916-b24c-86ba51f25b52
```

resolves as

```
http://acmeserver/mi/datasheet.aspx?dbkey=MI_Training&history=11331
```

and this URL with a Record GUID:

```
http://acmeserver/mi/datasheet.aspx?dbkey=MI_Training&recordGuid=0000098c-000e-4fff-8fff-dd92ffff0000
```

resolves as

```
http://acmeserver/mi/datasheet.aspx?dbkey=MI_Training&record=131862
```

6.1.2 URL for a specific Profile

To ensure that links continue to work when a database is replaced or superseded, you can link to a Profile instead of to an individual database:

```
http://HOSTNAME/mi/index.aspx?profileKey=profile
```

For example:

```
http://granta/mi/index.aspx?profileKey=Metals
```

Use the **Object Identities** page in MI:Viewer to find the Profile key; see Section 2.2.

6.1.3 URL for a search

To open MI:Viewer with a pre-defined search, you can include search terms separated by + (plus) in the URL as follows:

```
http://HOSTNAME/mi/index.aspx?search=term1+term2
```

This will search over all of the available Tables in the default Profile. For example:

```
http://acmeserver/mi/index.aspx?search=titanium+alloy+anodizing
```

The search can be restricted to only the Tables that appear in a particular Profile, by including the Profile key in the URL as well as the required search terms, for example:

```
http://granta/mi/index.aspx?profileKey=MI_Training_Master&search=titanium+alloy
```

Use the **Object Identities** page in MI:Viewer to find the Profile key; see Section 2.2.

Appendix A. Generating bookmark URLs (Switchboard Links)

The **Switchboard Link Generator** page in MI:Viewer enables you to construct a bookmark URL that opens MI:Viewer with your current Profile and database pre-selected. A number of other settings can also be specified in the URL, including your current database settings and user preferences, and your current search.

The Switchboard Link Generator is only available to users with GRANTA MI administrator privileges.

To generate a URL with settings, datasheet, and/or search information:

1. Log in to MI:Viewer as a user with administrative privileges for the GRANTA MI system.
2. Select the required Profile, Subset, Layout, and other options you want to include in the URL:
3. Select a Profile.
4. Select the desired Subset and Layout for each Table.
5. On the toolbar, click **Settings** and set the desired values under Database Options, Application Options, and Search and Optimization Options.
6. Select Read Mode or Edit Mode.
7. Click **Admin**, and then, under **Utilities**, click **Switchboard** and specify which settings you want to specify in the URL.
8. Select **Include your current User Preferences** to include your current settings for:
 - Application Options, and Search and Optimization Options
 - View Full/Summary Datasheet setting
 - Show empty items setting
 - Read Mode/Edit Mode setting

Note that if you choose this option, your current settings will override the user's settings when they follow the link.

9. Select **Include your Database Preferences** to include your current database settings for Subsets and Layouts, and the unit system and quality system options.
10. Select **Link to current search** to include your most recently-performed search in the URL. When this option is selected, MI:Viewer will open on the **Search and Substitute** page, with the saved search criteria pre-loaded and the search ready to run.
11. Select **Run the search after loading** to include your most recently-performed search in the URL and to perform that search automatically when the user loads MI:Viewer in their browser.

Note that the URL shown at the top of the page changes as you select and deselect options on this page.

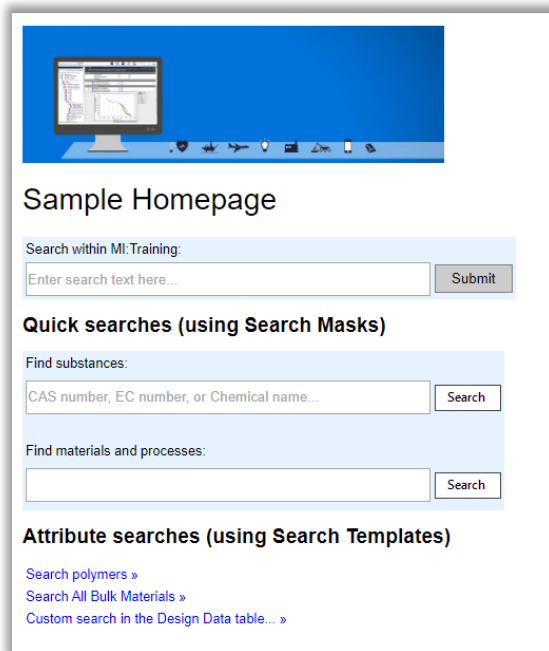
12. Copy the URL at the top of the **Link for Bookmarking** page and use it to create a Bookmark or Favorite in a browser.

Note that the generated URL begins `index.aspx?dbKey=`, and so Switchboard links are always specific to the database with which they were made.

Appendix B. Sample database home page with search tools

Shown below is a database home page that includes a number of different search tools, including:

- A simple text search control that will search the MI:Training database for the specified string and display the results.
- Search controls that perform a search for the specified string using the “Search for substances” and “Universal Data” Search Masks in the MI:Training database, and display the results.
- Search controls that open the Search page with the “Search Polymers” or “Search All bulk materials” Search Templates pre-loaded.
- A “custom” search control for an Attribute search in the Design Data Table.



Index.aspx file for this home page:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
<link rel="StyleSheet" href="/homepage.css" type="text/css" />

<title>Sample homepage</title>
</head>

<body >

```

```

<h1>Sample Homepage</h1>

<table class="color">
  <form action="../../searchResults.aspx" target="MIWeb_side" method="get"
autocomplete="off">
  <tr><td colspan="2" valign="middle">Search within MI:Training:</td></tr>
  <tr>
    <td valign="middle">
      <input type="text" name="search" id="search1" style="width:380px; height:26px"
placeholder="Enter search text here..." onfocus="if(this.value==this.defaultValue)
this.value='';" class="box" />
    </td>
    <td valign="middle">
      <input type="hidden" />
      <input type="submit" alt="Search" name="submit" class="button" />
    </td>
  </tr>
</form>
</table>

<h2>Quick searches (using Search Masks)</h2>

<table class="color">
  <tr><td colspan="2" valign="middle">Find substances:</td></tr>
  <tr>
    <form action="../../searchResults.aspx" target="MIWeb_side" method="get"
autocomplete="off">
    <td valign="middle">
      <input type="text" name="search" id="search2" style="width:380px; height:26px"
placeholder="CAS number, EC number, or Chemical name..."
onfocus="if(this.value==this.defaultValue) this.value='';" />
    </td>
    <td valign="middle">
      <input type="hidden" name="dbKey" id="dbkey" value="MI_Training_Master" />
      <input type="hidden" name="searchmask" value="5" />
      <input type="image" src="search.png" alt="Search" title="Perform this search"
name="submit" class="button" />
    </td>
  </form></tr>

  <tr>
    <td colspan="2" valign="middle"><br />Find materials and processes:</td>
  </tr>
  <tr>
    <form action="../../searchResults.aspx" target="MIWeb_side" method="get"
autocomplete="on">
    <td valign="middle">
      <input type="text" name="search" id="search3" class="search-box"
style="width:380px; height:26px" />

```

```
</td>
<td valign="middle">
  <input type="hidden" name="dbkey" value="MI_Training" />
  <input type="hidden" name="searchmask" value="3" />
  <input type="image" src="search.png" alt="Search" title="Perform this search"
name="submit" class="button" />
</td>
</form>
</tr>
</table>

<h2>Attribute searches (using Search Templates)</h2>
<table>
  <tr><td class="searches"><a
href="../../searchPage.aspx?searchTemplate=3&searchType=Reduced&dbKey=MI_Training"
class="db-link" title="Create a search query for polymers based on Tradenames, Polymer
type, % filler, and/or Filler type" >Search polymers &raquo;</a></td></tr>
  <tr><td class="searches"><a
href="../../searchPage.aspx?searchTemplate=2&searchType=Advanced&dbKey=MI_Training"
class="db-link" title="Create a search query based on values for Price, Composition,
Tensile strength, and/or durability in salt water">Search All Bulk Materials
&raquo;</a></td></tr>
  <tr><td class="searches"><a
href="../../searchPage.aspx?table=8&dbKey=MI_Training" class="db-link">Custom search
in the Design Data table... &raquo;</a></td></tr>
</table>
</body>
</html>
```