

Memory Use in dLOC ASP.net Front End

The chart below shows all of the memory objects which persist past the construction of each page. The majority of these are used to prevent the application from having to pull information from the database for each request. The scope and timeout for each of these elements is also listed.

These elements in memory can be reset by adding *?m=z* to the end of the URL (i.e. <http://www..../UFDC.aspx?m=z>)

Scope	Access	Object Type	Use Description
Application (no timeout)	Application["Translation"]	Language_Support_Info (class encapsulates multiple hash tables, one for each language)	Stores the translations to be used for the headers and full citation. Source is the <i>UFDC_Metadata_Translations</i> table in the SQL database.
Application (no timeout)	Application["Codes"]	Code_Manager (class encapsulates two hash tables)	Stores the conversion from UFDC_Code to the current Greenstone_Code. Contains the data for both the Collection Groups, as well as the Collections.
Application (no timeout)	Application["LastReset"]	DateTime	Stores the date and time all of these elements in memory were last reset. This is to prevent two resets within the same minute, which may be a symptom of an attack.
Application (no timeout)	Application["Header"]	string	Default header HTML string, to be used by default
Application (no timeout)	Application["Footer"]	string	Default footer HTML string, to be used by default
Application (no timeout)	Application["Maintenance"]	string	HTML string is displayed when maintenance is being performed. This is determined by the <i>UFDC_Maintenance_Flag</i> table in the database.
Application (1 hour timeout)	Cache["Group_CODE"] (i.e., Cache["Group_FOTO"] is the group where <i>GroupCode</i> = 'FOTO')	UFDC_Collection_Group	Stores the data about a collection group, including the collections under this group in Greenstone, as well as the home page HTML.
Application (1 hour timeout)	Cache["Coll_CODE"] (i.e., Cache["Coll_UAPC"] is the collection where <i>CollectionCode</i> = 'UAPC')	UFDC_Collection	Stores the data about a collection, including the sub-collections under this group, as well as the home page HTML.

Application (1 hour timeout)	Cache["Sub_CODE"] (i.e., Cache["Sub_MHCC"] is the subcollection <i>SubCollectionCode</i> = 'MHCC')	UFDC_SubCollection	Stores all the data about a single subcollection.
Application (1 hour timeout)	Cache["Html###"] (i.e., Cache["Html12"] is the object <i>HtmlElementsID</i> = 12)	UFDC_HTML_Elements	Stores all the presentation information, like header and footer html, style sheet to use, and which the HTML for the banner.
Application (5 minute timeout)	Cache["Item###"] (i.e., Cache["Item12"] for the object which corresponds to <i>ItemID</i> = 12)	Item_Info	Stores all the information about a single item, including a DataTable of all the pages, and another with all the page-level downloads.
Session (20 minute timeout)	Session["LastSearch"]	string	URL for the last search performed during this session
Session (20 minute timeout)	Session["LastSearchType"]	string	Last search type used, (i.e. 'keyword', 'basic', 'advanced'...)