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Developer's Guide

Engagement

12/17/2025

Engagement

The Engagement Agent provides the engagement mechanism — proactive/reactive chat communication.

Chat JS Application

To implement chat, you simply include the Chat JS Application script in your web pages. This short piece of regular JavaScript activates chat functions by inserting the **GWC.min.js** script into the page. The JavaScript asynchronously loads the application into your pages, which means that Chat JS Application does not block other elements on your pages from loading.

Basic Configuration

The simplest way to get the Chat JS Application for your site is by creating and adding a script to your web pages. See [Configuring the Instrumentation Script](#) for details.

Advanced Configuration

The Chat JS Application script consists of two parts: **script loader** and **configuration**. The script loader part actually loads the **GWC.min.js** script, while the configuration part sets options that control things like window size and localization.

Script Loader

To load Chat JS Application, you just need to include a short piece of regular JavaScript, the script loader, in your HTML. That JavaScript will asynchronously load the application into your pages, which means that Chat JS Application will not block other elements on your web page from loading.

For example, your script loader code might look like this:

```
//Script loader
(function(v) {
  if (document.getElementById(v)) return;
  var s = document.createElement('script'); s.id = v;
  s.src = ( 'https:' == document.location.protocol ? 'https://' : '<Web Engagement Server
host>:<Web Engagement Server secure port>' :
  'http://<Web Engagement Server host>:<Web Engagement Server port>' ) +
  '/server/resources/js/build/GWC.min.js';
  s.setAttribute('data-gwc-var', v);
  (document.getElementsByTagName('head')[0] || document.body).appendChild(s);
})('<_gwc>');
```

Important

The above example uses `_gwc` as the configuration global variable — see the "Configuration" section below for details.

Configuration

By default the chat application uses the `_gwc` global variable (you can change this in the script loader) that is created before Chat JS Application script loader is actually added to the page. Some of the options you set in the configuration code can be overwritten in the Chat Widget JS API methods (`startChat(options)` and `restoreChat(options)`) for a particular chat session, if the parameter name matches the option name.

For example, your configuration code might look like this:

```
/* Configuration */
var _gwc = {widgetUrl: 'http://<Web Engagement Server host>:<Web Engagement Server
port>/server/api/resources/v1/chatWidget.html',
            serverUrl: 'http://<Web Engagement Server host>:<Web Engagement Server
port>/server/cometd'};
```

Options

Option	Type	Default Value	Mandatory	Description
serverUrl	string	undefined	yes, when default "transport" is used	URL of the CometD chat server for default (built-in) CometD transport.
widgetUrl	string	undefined	yes, when "embedded" is set to false ("popup" mode)	URL of the chat widget HTML that is open in an external window when operating in "popup" mode. By default, the chat widget is stored under the Web Engagement Server and is available at the following URL: http://{gwe_server}:{server_port}/server/api/resources/v1/chatWidget.html ; however, you can store the chatWidget.html file as a static resourced under any third-party server.
embedded	boolean	false	no	Sets chat mode of operation: "embedded" (chat widget is rendered directly on a page) or "popup" (chat opens in a separate browser window). Default is "popup". Pass the value true to switch to "embedded" mode.
localization	object or string or function	undefined	no	Provider for custom localization, which will be one of the following: A JavaScript object containing localization data

Option	Type	Default Value	Mandatory	Description
				• A function that returns an object containing localization data • A function that accepts a callback and calls it with an object containing localization data • The URL for an external JSON file containing localization data If omitted, the default English localization will be used. See Localization for more on how to localize the chat widget.
windowSize	object {width: <number>, height: <number>}	{ width: 400, height: 500 }	no	Size of external chat window when operating in "popup" mode.
windowName	string	genesysChatWindow	no	A string name for the new window that will be passed to the window.open call when opening chat widget window. For details, see https://developer.mozilla.org/en-US/docs/Web/API/Window.open. Note: If you need to support Internet Explorer versions 8 or 9, windowName must not contain either hyphens ("-") or spaces (" "), as documented at http://stackoverflow.com/questions/710756/ie8-var-w-

Option	Type	Default Value	Mandatory	Description
				window-open-message-invalid-argument.
windowOptions	object	The value of the windowSize option.	no	An object containing window options that are passed to the window.open call when opening chat widget window. You can pass any window options, such as position (top, left), whether to show browser buttons (toolbar), location bar (location), and so on. For details about possible window options, see (https://developer.mozilla.org/en-US/docs/Web/API/Window.open). All options are converted to a string that is passed to the window.open call.
debug	boolean	false	no	Set to true to enable chat debugging logs (by default standard console.log is be used, see the "logger" option if you want to override that).
logger	function	console.log	no	Pass a function that will be used for chat logging (if debug is set to true) instead of the default console.log. The function has to support the interface of the console.log — it must accept an arbitrary number of arguments and argument types. To use the custom logging function in a

Option	Type	Default Value	Mandatory	Description
				separate window, you have to pass it directly on the widget page to the startChatInThisWindow method. Important The "logger" function works only for the Chat Widget JS API context.
registration	boolean or function	true	no	By default chat starts with a built-in registration form (that you can customize using <code>ui.onBeforeRegistration</code>). Pass the value false to disable this default built-in registration form. See Custom registration in the Chat Widget JS API for details.
userData	object	undefined	no	Can be used to directly attach necessary UserData to a chat session.
createContact	boolean	true	no	Determines whether new contact should be created from registration data if it doesn't match any existing contact. Only effective if registration data is present (collected either by built-in or custom registration workflow). See createContact in the Chat Widget JS API for details.

Option	Type	Default Value	Mandatory	Description
maxOfflineDuration	number	5	no	Time (in seconds) during which state cookies are stored after page reload/navigation. If cookies expire, the chat is not restored. Basically, this option means "how long shall the chat session live after the user leaves my website?"
ui	boolean or object	true	no	Pass the value false to disable the chat widget UI completely. Or pass an object with "hook" functions that can modify the built-in UI. See ui in the Chat Widget JS API for details.
transport	object	undefined	no	Custom transport instance (for example, REST-based).
disableWebSockets	boolean	false	no	By default, chat attempts to use WebSockets to connect to the server. When the WebSocket connection is unavailable (for example, if your load balancer doesn't support WebSockets), chat switches to other, HTTP-based, means of communication. This might take some time (a matter of seconds, usually), so if you want to speed up the process, you can disable WebSockets for chat by

Option	Type	Default Value	Mandatory	Description
				passing true to this option. Important This option is only effective with default (built-in) transport.
templates	string	undefined	no	The URL of the HTML files containing templates that are used to render the chat widget. The request is made via either JSONP or AJAX, following the same logic as for localization files (see Localization in the Chat Widget JS API). Default templates are included into the JavaScript source, so by default no requests are made to load them. The template system is based on the popular lodash / underscore templates: http://lodash.com/docs#template , http://underscorejs.org/#template
autoRestore	boolean	true	no	On every page reload/ navigation, chat automatically attempts to restore the chat widget using the restoreChat method in the Chat Widget JS API. You can use this option to disable this behavior if you want more control over chat widget restoration.

Option	Type	Default Value	Mandatory	Description
onReady	array or function	undefined	no	This field is a callback function fired when the application has initialized. The Chat Widget JS API object is provided as the first argument of the callback function. <pre>_gwc.onReady.push(function(chatAPI) { alert('Chat application ready!'); });</pre> If you use <code>_gwc.onReady.push</code>, make sure that <code>onReady</code> is defined as an array. <pre>var _gwc = { ... onReady: [] };</pre>

Configuration Examples

Basic configuration for proactive engagement integration

```
/* Configuration */
var _gwc = {widgetUrl: 'http://<Web Engagement Server host>:<Web Engagement Server
port>/server/api/resources/v1/chatWidget.html'};

// Script loader
(function(v) {
    if (document.getElementById(v)) return;
    var s = document.createElement('script'); s.id = v;
    s.src = ('https:' == document.location.protocol ? 'https://' : '<Web Engagement Server
host>:<Web Engagement Server secure port>') + 'http://<Web Engagement Server host>:<Web Engagement Server port>') + '/server/
resources/js/build/GWC.min.js';
    s.setAttribute('data-gwc-var', v);
    (document.getElementsByTagName('head')[0] || document.body).appendChild(s);
})('_gwc');
```

Basic configuration for reactive chat

```
/* Configuration */
var _gwc = {widgetUrl: 'http://<Web Engagement Server host>:<Web Engagement Server
port>/server/api/resources/v1/chatWidget.html',
    serverUrl: 'http://<Web Engagement Server host>:<Web Engagement Server
port>/server/cometd'};

// Script loader
(function(v) {
    if (document.getElementById(v)) return;
    var s = document.createElement('script'); s.id = v;
    s.src = ('https:' == document.location.protocol ? 'https://' : '<Web Engagement Server
host>:<Web Engagement Server secure port>') + 'http://<Web Engagement Server host>:<Web Engagement Server port>') + '/server/
resources/js/build/GWC.min.js';
    s.setAttribute('data-gwc-var', v);
    (document.getElementsByTagName('head')[0] || document.body).appendChild(s);
})('_gwc');
```

Advanced configuration for chat application

```
/* Configuration */
var _gwc = {
    serverUrl: 'http://<Web Engagement Server host>:<Web Engagement Server port>/server/
cometd',
    widgetUrl: 'http://<Web Engagement Server host>:<Web Engagement Server port>/server/api/
resources/v1/chatWidget.html',
    autoRestore: true,
    debug: false,
    embedded: true,
    createContact: true,
    localization: 'http://<Web Engagement Server host>:<Web Engagement Server port>/server/
api/resources/v1/locale/chat-fr.json',
    windowSize: { width: 400, height: 500 },
    windowName: 'myWindowName',
    windowOptions: {
        left: 0,
        top: 0
    }
}
```

```
    },
    /* Callbacks */
    onReady: [function (chatAPI) {
        var options = {
            registration: true
        };
        chatAPI.startChat(options);
    }]
};
// Script loader
(function(v) {
    if (document.getElementById(v)) return;
    var s = document.createElement('script'); s.id = v;
    s.src = ('https:' == document.location.protocol ? 'https://' : '<Web Engagement Server
host>:<Web Engagement Server secure port>') + '/server/
resources/js/build/GWC.min.js';
    s.setAttribute('data-gwc-var', v);
    (document.getElementsByTagName('head')[0] || document.body).appendChild(s);
})('_gwc');
```

Tip

For more information about the start parameters, see the [Chat Widget JS API](#)

Chat JS Application API

The Chat JS Application API is provided by the [Chat Widget JS API](#) component. The API object provides two functions: [startChat\(options\)](#) and [restoreChat\(options\)](#). To access the API, use the `onReady` option in the Chat JS Application configuration.

Reactive Chat

The following example shows how you can start reactive chat on a button click using the `startChat` method.

```
$('#startChatButton1, #startChatButton2, #startChatButton3').click(function () {
    _gwc.onReady.push(function (chatAPI) {
        chatAPI.startChat();
    });
});
```

If you want to provide monitoring information to the chat session, you should attach the **visitID** and **pageID** from the Tracker Application to the chat interaction.

```
$('#startChatButton1, #startChatButton2, #startChatButton3').click(function () {
    _gwc.onReady.push(function (chatAPI) {
        _gt.push(['getIDs', function (IDs) {
            chatAPI.startChat({userData: {visitID: IDs.visitID, pageID: IDs.pageID}});
        }]);
    });
});
```

How To

Auto-generate an e-mail address based on the visitID

Use the Tracker JS Application and the Chat JS Application together:

```
_gwc.onReady.push(function (chatAPI) {  
  _gt.push(['getIDs', function (IDs) {  
    /* Start chat with generated email */  
    chatAPI.startChat({ userData: {  
      visitID: IDs.visitID,  
      pageID: ID.pageID,  
      email: IDs.globalVisitID + '@anonymous.com'  
    }});  
  }]);  
});
```

Customization

For details about how to customize the callback widget, see [Customizing the Browser Tier Widgets](#).