SitePal Technical Note: Implementing Your AI Agent

This technical note explains how to implement an interactive AI Agent in your web page.

Note: You do not need to be a programmer to follow the instructions in this document and setup your AI agent, though basic familiarity with HTML & Javascript will be helpful.

1. Introduction

Let's first get some terminology established. We distinguish between:

a. Your "AI Bot" - a faceless AI knowledge base which provides (preferably relevant) textual answers to textual questions
b. Your "AI Agent" - an animated avatar, embedded into your web page, and able to respond to textual or verbal input by speaking your AI Bot's responses out loud.

There are multiple ways to setup an AI Bot (moving forward we'll just call it "Bot" for short). You could use the built in solution that SitePal offers (the AIMC), or you could use a 3rd party solution (such as OpenAI's ChatGPT, IBM Watson and many others) and integrate it with your SitePal AI Agent.

If you choose to use a 3rd party Bot, then the first thing to be aware of is that some 3rd party AI providers are "Pre-Integrated" with SitePal, and others are not.
- If the provider of your choice is Pre-integrated – that simplifies the implementation.
- If the provider of your choice is not Pre-intgerated – you can still connect it to SitePal, but you will need to implement the integration yourself.

In this document we primarily discuss the Pre-integrated case – for which we provide step by step "how-to" instructions. For the non Pre-integrated case – we provide general guidelines at the end of the document.

Note: How do you find out whether your 3rd Party Bot Solution is Pre-Integrated or not? In your SitePal account, select the "Connect" page from the "Welcome" menu at top right. Here you will see listed the 3rd Party AI vendors that we have pre-integrated with. Another option is to review the [Client API reference](#) documentation for the function 'sayAI'. Available Vendor IDs are listed there.

Implementing an AI Agent requires a Gold Plan or higher.

2. What is AIMC and where does it fit in?

If you intend to use a 3rd party Bot, you can skip this section.
Your (Gold Plan and higher) account comes with a built-in knowledge base (a.k.a. "Bot") which you can customize to your needs. The built-in Bot is created in AIML and comes with some

22,000 built in entries that enable it to answer many basic questions. In the AIMC environment (within SitePal) you can revise this information and add to it.

This document does not discuss using the AIMC & editing your AIMC Bot. Here we focus on setting up your SitePal speaking avatar to be your AI Agent - responding to to users' questions while relying on your Bot to provide the answers. Regardless of whether the Bot is built-in (AIMC) or external (3rd Party).

For the purposes of this integration, AIMC falls into the category of Pre-integrated Bot solutions.

> *Note: As your AIMC Bot comes with built in "knowledge" as described above, there is no need to first edit your Bot in AIMC before implementing your AI Agent. In fact, the order does not matter. You may setup your talking AI Agent in your web page first, and then edit the Bot in AIMC, or do so in parallel. As you make changes to the Bot and compile and deploy those changes in AIMC, you will see the changes reflected in the answers provided by your AI Agent.*

3. Implementation – Pre-Integrated Case

To implement your AI Agent, we will use the following technical example as a guide - https://sitepal.com/api/examples/sayAI.html
The following simple steps will enable you to adapt this working example into your own web pages, using your own SitePal avatar and the Pre-Integrated Bot of your choice. Once done, you can proceed to modify the design & functionality of the page as you see fit.

Step 1 – Setup your Bot in the Connect page

If you are using AIMC you can skip this step.
In your SitePal account, select the "Connect" page from the "Options" menu at top right. To create your Bot, add the API Key for the Pre-Integrated AI vendor of your choice, and give it a unique name. This name will serve as an identifier for your Bot when you use the API (see step 4 below)

Step 2 – Copy our example to get started

Copy the source code of the example to an empty web page, and place the new page on your web server.

> *Tip: To access the example source code in Chrome, right click anywhere on the page, and select "view source". Instructions for viewing the source code of a web page in different browsers: https://www.computerhope.com/issues/ch000746.htm*

Step 3 – Replace our SitePal Scene with your own

Locate the SitePal embed code in the page, and replace it with embed code of a SitePal Scene from your own account.

Note: You may wonder why not keep and use the embed code from the example?
The answer comes in 3 parts:
a. It won't work - your web domain is not configured in our demo account (see step 5 below).
b. You would not be able to select or design the speaking avatar.
c. You would not be able to edit the knowledge base (Bot) and adapt it to your needs.
Any one of the above reasons would suffice of course, but I've listed all three to clarify what we are looking to achieve - which is to provide you with complete control over your AI Agent.

Step 4 – Specify the Bot you wish to use

If you are using AIMC you can skip this step.
Our example uses the AIMC Bot, which is the default selection in case no Bot is specified. To select your own 3rd Party Bot, update the call to 'sayAI' by specifying the Vendor ID and the Bot Name (as named in Step 1)

Example: In this code snippet you can see the added values. 'CB' is the Vendor ID for Chatbase, and 'Alice5' is the name we gave our Bot.

```
sayAI(myInput.value,3,1,3,'','','CB','Alice5')
```

Review the [Client API Reference](#) on our support page for more complete information about this function.

Step 5 – Setup your Licensed Domain

You need to add your web page's domain name to your Licensed Domains to enable dynamic TTS on your page. Without it, your SitePal Avatar will not speak. This is a security measure designed to protect your TTS audio from non-authorized usage.
In your SitePal account, go to the 'Settings' page from the 'Welcome' menu at top right.
At the bottom left of the page, you can edit your Licensed Domains. This feature restricts dynamic TTS use from your account to domains which you authorize.
The domain name you need to authorize is the name visible in the browser's address bar when your web page loads. Protocol and detailed path information removed, the domain name looks something like this -

www.mycompany.com   or   69.63.176.13

Note: "localhost" and "127.0.0.1" are always supported and do not need to be added.
Wildcards for the first part of the domain are supported.

Step 6 – Test your AI Agent

Deploy your web page to your server and open it in your browser. Try out your Bot by submitting a question and listening to your avatar speak the response. Your AI Agent should be fully functional now.

Note: double clicking on the html page which you created, on your computer, will not work. The page must be delivered by a web server in order to function. If you are just starting out with web development - you may want to check out the Apache server. It is a popular choice among developers, and can be installed locally on your laptop or desktop computer for development purposes.

4. Implementation – Non Pre-Integrated Case

To use your preferred 3rd party AI Bot solution which is not Pre-Integrated with SitePal, you will need to implement the integration yourself. This is not particularly difficult but requires programming expertise on both front end and back end. It is also mostly outside the scope of this document. Following is an overview of what you need to do.

In a nutshell, you will need to understand how to call your AI 3rd Party Vendor's HTTP REST API from your web page, then feed their response to the SitePal avatar on your page, using our API. You will not be using the 'sayAI' JS function call, but the 'sayText' function call.

Your implementation should work as follows:
- User inputs their question on your page (using either text or audio)
- Your page submits the text query to your server.
- Your server calls your 3rd Party Vendor's HTTP REST API, and receives the Bot's text response.
- Your page receives back the response text.
- Your page calls the 'sayText' function to have your SitePal avatar speak the response.

The following technical note explains how to do the last part:
https://sitepal.com/docs/Using_The_TTS_API.pdf

Note: To call your AI vendor's API from your web page, you would likely want to implement a relay on your server (as outlined above), and avoid making the 3rd party HTTP or HTTPS call directly from your web page – due to security concerns.

5. Last But not Least – Usefull Tips and Links

You may update your SitePal avatar's appearance at any time by editing the Scene which you embedded in your page. There is no need to re-embed, any changes to your Scene will immediately update its appearance wherever it is embedded.

You may prefer to use a different TTS voice than the one used in our example. To do so modify the parameters sent to the function 'sayAI'. Review the Client API Reference available on our support page - and locate the section documenting 'sayAI' and its parameters.

For a complete list of all available SitePal TTS voices, including 3rd party voices – review our TTS Languages & Voices reference document.

Tip: check out https://ttsdemo.com for a fun & convenient way to try out our different voices & select the one you like. This demo features the same voices that are available in SitePal, except for 3rd Party voices. Once you identify the voice that you want to use, rollover the small 'cloud' icon just ot the right of the voice menus. A tooltip will display the Voice, Language, and Engine IDs to use for that voice.

You might wonder whether it is possible to dispense with typing and simply talk to your AI Agent. Well, we have created a technical example that does exactly that. If you are interested in implementing the same, you can repeat the process using this page as your starting point: https://sitepal.com/api/examples/sayAI-STT.html

We've also created a nice demo that showcases this functionality which can be accessed here – www.aispeechdemo.com

Questions? Send us a note to: support@sitepal.com