Getting Started with Revit Server REST API

This document gives you a brief overview of what is involved in using Revit Server REST API. We have created a sample application as a mean of demonstrating the usage. Please locate the following sample accompanying this document, and take a look at it while reading this document:

* “Revit Server Viewer” - sample application accompanying this document.

Resources

You can find the detailed full documentation about the Revit Server REST API under the Revit SDK folder:

* *<SDK folder>\Revit Server SDK\Revit Server REST API Reference.pdf*

If you are new to REST, you may find the following article helpful to learn about REST:

* “A Brief Introduction to REST”   
  <http://www.infoq.com/articles/rest-introduction>

We assume you are familiar with the .NET API and understand the basic idea of REST.

Description

You can create Http Requests in .NET in various ways. Here we use System.Net.WebRequest for this:

WebRequest request =   
 WebRequest.Create(  
 "***http://<host>/RevitServerAdminRESTService/AdminRESTService.svc***"  
 );

You simply have to specify the URI address that the request is targeting. Then you can specify the type of request (GET, PUT, POST, etc).

request.Method = "GET";

As the API reference points it out, you also need to provide information in the request’s header. You can add the necessary name-value pairs to the request’s header like this:

request.Headers.Add("User-Name", "Adam");

You also have to add a command string that will specify what information you are requesting. You need to append it to the service URI with a / in between:

WebRequest.Create("http://<host>/RevitServerAdminRESTService/AdminRESTService.svc***/serverProperties***");

If you need to get information from a specific folder or file, you also need to specify the path to it with each folder-subfolder separated by |. The root folder is represented by |

WebRequest.Create("http://<host>/RevitServerAdminRESTService/AdminRESTService.svc***/|Folder|SubFolder|File/history***");

Depending on the actual request, the result will be different. But each time, it is organized using the json format. You can convert the json data to xml format in .NET and then read it using XmlDictionaryReader:

XmlDictionaryReader jsonReader =

JsonReaderWriterFactory.CreateJsonReader(

request.GetResponse().GetResponseStream(), quotas  
 );

For more information, please refer to the *Revit Server REST API Reference.pdf.*

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3/28/2011