Ask a Question Write a Blog Post

Login



Jenish Prabhu

April 27, 2015 | 14 minute read

# File upload using SAPUI5 Control

**□** 16 6 **3**2,317

Follow

Below is the approach that I tried and successfully able to upload File to the Gateway Service.



<u>Step1:</u> Extend FileUploader (sap.ui.unified.FileUploader)



Overwrite the Upload method by AJAX call passing X-CSRF-Token

jQuery.sap.declare("com.ODataFileUploader.Component");

jQuery.sap.require("sap.ui.unified.FileUploader");

```
sap.ui.unified.FileUploader.extend("com.ODataFileUploader.Component", {
metadata:{
    properties: {
        "modelName": "string",
        "slug": "string",
        "csrf": "string"
        },
    upload: function() {
        var file = jQuery.sap.domByld(this.getId() + "-fu").files[0];
        try {
        if (file) {
                this._bUploading = true;
                var that = this;
                var _handleSuccess = function(data, textStatus, jqXHR){
                that.fireUploadComplete({"response": "Success: File uploaded to entity"});
```

```
that._bUploading = false;
    };
    var _handleError = function(data){
   var errorMsg = ";
    if (data.responseText[1]){
            errorMsg = /<message>(.*?)<\/message>/.exec(data.responseText)[1];
    }else{
            errorMsg = 'Something bad happened';
    that.fireUploadComplete({"response": "Error: " + errorMsg});
    that._bUploading = false;
var oHeaders = {
    "x-csrf-token": this.mProperties.csrf,
    "slug": this.mProperties.slug,
    "X-Requested-With": "XMLHttpRequest",
```

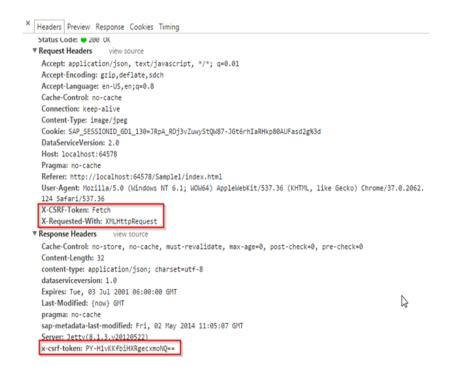
};

```
"Content-Type": file.type,
    "DataServiceVersion": "2.0",
    "Accept": "text/plain, */*"
    };
jQuery.ajax({
    type: 'POST',
    url: this.getUploadUrl(),
    headers: oHeaders,
    cache: false,
    contentType: file.type,
    dataType: "text",
    processData: false,
    data: file,
    success: _handleSuccess,
    error: _handleError
});
```

```
jQuery.sap.log.info("File uploading to" + this.getUploadUrl());
         } catch(oException) {
           jQuery.sap.log.error("File upload failed:\n" + oException.message);
           renderer: {
           });
Step2: Fetch X-CSRF-Token
var url1 = getUrl("/sap/opu/odata/sap/ZGW_FILES_APP_SRV");
          var csrfToken = "";
          var aData = jQuery.ajax({
          url : url1,
          headers: { "X-CSRF-Token":"Fetch" ,
              "X-Requested-With": "XMLHttpRequest",
```

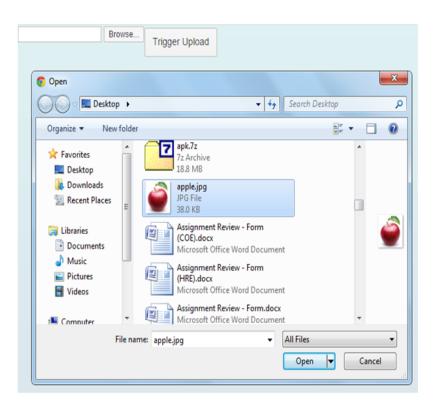
```
"DataServiceVersion": "2.0" },
          type: "GET",
          contentType : "application/json",
          dataType : 'json',
success : function(data, textStatus, jqXHR) {
          csrfToken = jqXHR.getResponseHeader('x-csrf-token');
          oFileUploader1.setCsrf(csrfToken);
          oFileUploader1.setSlug("200000664_MOB15");
          oFileUploader1.setUploadUrl(getUrl("/sap/opu/odata/sap/ZGW FILES APP SRV/FileSet"));
              oFileUploader1.upload();
             },
          error: function(XMLHttpRequest, textStatus, errorThrown) {
          }
          });
          }
});
```

**Step3:** Call File Upload Service by passing already Fetched X-CSRF-Token along with any inputs in the HTTP Headers

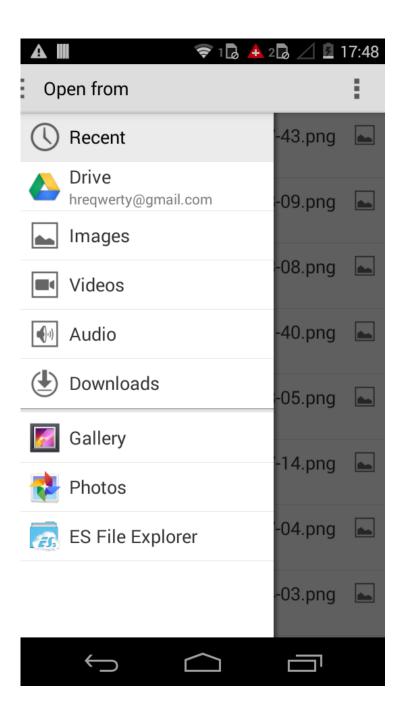


Step4: Upload the Actual file on Screen

From Desktop:



From Mobile:



**Step5:** Trigger Upload Action

```
var btnSubmit = new sap.m.Button({
                     text: 'Trigger Upload',
           press:function() {
      var url1 = getUrl("/sap/opu/odata/sap/ZGW FILES APP SRV");
           var csrfToken = "";
           var aData = jQuery.ajax({
                                url : url1,
                                headers: { "X-CSRF-Token":"Fetch" ,
                  "X-Requested-With": "XMLHttpRequest",
                        "Content-Type": "image/jpeg",
                        "DataServiceVersion": "2.0" },
                                type: "GET",
             //jsonpCallback : 'getJSON',
                              contentType : "application/json",
                              dataType : 'json',
             //data : "",
                              success : function(data, textStatus, jqXHR) {
                                    csrfToken = jqXHR.getResponseHeader('x-csrf-token');
                                    oFileUploader1.setCsrf(csrfToken);
```

```
oFileUploader1.setSlug("2000006");
oFileUploader1.setUploadUrl(getUrl("/sap/opu/odata/sap/ZGW_FILES_APP_SRV/FileSet"));
                                    oFileUploader1.upload();
                              },
                              error: function(XMLHttpRequest, textStatus, errorThrown) {
                              }
                           });
            }
              });
```

Assigned tags	
SAPUI5	
SAP Enterprise Portal	
fileuploader	
Similar Blog Posts	~
Clear browser cache ( Chrome, Safari, IE ) from front-end Server to get updated version of SAPUI5 code	
By Former Member Jun 23, 2015	
Sample Fiori Application showcase Attachment Uploading Capabilities of SAPUI5 using XSODATA and HANA TABLE	
By Pallavkumar Jadav Jun 29, 2020	
How to use SAPUI5 on SAP NetWeaver 7.3 EP1 SP5	
By Volker Margenfeld Nov 08, 2012	
Related Questions	~
Unable to send file to backend using drag and drop technique using sap.m.uploadCollection	
By AJAY GUPTA Apr 12, 2018	
FileUpload of sapui5.	
By Manali Shah Jun 28, 2016	
SAPUI5 file upload control	
By Former Member Feb 28, 2016	

## 16 Comments

## You must be Logged on to comment or reply to a post.



Former Member May 12, 2015 at 11:32 am

Hi Jenish, it is a very helpful blog. I am working on file uploader functionality. I have created gateway service which upload files through GOS. Now in UI5 I am getting csrf token thru ajax call. I am stuck with file uploader extend, this extension must be done where?? can you please guide me with this.

Best regards,

Siva

Like 0 | Share



Jenish Prabhu | Blog Post Author May 22, 2015 at 5:45 pm

Hi Sivadurga,

You can have that declared in separate FileUploader.js file and refer it.

Like 0 | Share



Jenish, thanks for your reply, I have extended this API in index.html under <script> tag. Its working fine, i am able to upload files from FIORI App to SAP.

Best regards,

Siva

Like 0 | Share



Jenish Prabhu | Blog Post Author June 8, 2015 at 8:09 am

Wonderful □

Like 0 | Share



Sagar Patil July 27, 2015 at 1:23 pm

Hi Jenish,

Thanks for your post. It helped me to upload the file to gateway server successfully.

You have used the sap.ui.unified.FileUploader to upload the files.

It would be of great help if you let me know the end to end process of how file upload can be achieved using sap.m.UploadCollection.i.e. from SAPUI5 application to abap server using gateway services.

In sap.m. Upload Collection we have option to upload multiple files. I want to know, how it is handled in gateway services.

Thanks and Regards,

Sagar M Patil



## Prabhat Singh Pathania November 6, 2015 at 6:50 am

Hi.

Do you have any useful links for the same?

Like 0 | Share



#### Faiza Anjum

September 15, 2016 at 6:19 am

Hello Prabhat,

I have a similar requirement. I need to upload multiple attachments which can be of different types. I want to do this via UploadCollection and finally send the group of attachments to abap server as a gateway service.

Were you able to achieve this.

Any help in this regard is appreciated

Kind Regards,

Faiza.

Like 0 | Share



# Prabhat Singh Pathania

September 15, 2016 at 7:20 am

Hi Faiza,

Yes I was able to do file upload using Upload Collection.

I didn't use 'pending' feature though.

I checked your profile, if you have sap ID, then we can discuss over skype call.

Else I will try to explain things here.

Regards,
Prabhat.Singh.Pathania
Like 0 | Share



#### Faiza Anjum

September 15, 2016 at 6:19 am

Hello Sagar,

I have a similar requirement. I need to upload multiple attachments which can be of different types. I want to do this via UploadCollection and finally send the group of attachments to abap server as a gateway service.

Were you able to achieve this.

Any help in this regard is appreciated

Kind Regards,

Faiza.

Like 0 | Share



# Akhilesh Upadhyay

September 16, 2016 at 1:23 pm

Hello Faiza,

I have implemented it as below, i am not sure but might work for you, also i have attach a link below that might help you to understand the backend part as well.

//In XML:

<UploadCollection change="onAttachmentChange"</pre>

fileDeleted="onAttachmentDeleted" fileRenamed="onAttachmentRenamed"

```
fileSizeExceed="onAttachmentSizeExceeded"
fileType="{detailView>/allowedFileExtension}"
id="idAttachments" maximumFilenameLength="255"
multiple="false" noDataText="No attachment found"
showSeparators="All" typeMissmatch="onAttachmentTypeMissmatched"
uploadComplete="onAttachmentUploadComplete"
uploadEnabled="true" uploadUrl="{detailView>/attachmentUploadURL}">
 < UploadCollectionItem contributor="{CreatedBy}"
 documentId="{Itemno}" enableDelete="true"
 enableEdit="false" fileName="{Filename}"
 id="idAttachmentItem " mimeType="{Mimetype}"
 uploadedDate="{ path: 'CreatedOn', type: 'sap.ui.model.type.Date', formatOptions: {pattern: 'dd.MM.yyyy'} }"
 url="{Url}" visibleDelete="{app>/requestEditMode}"
 visibleEdit="false" />
</UploadCollection>
//Controller file:
```

```
//On Init:
this._oAttachments = this.byId("idAttachments");
this._oAttachmentItem = this.byId("idAttachmentItem").clone();
this._oComponent = this.getOwnerComponent();
this._oModel = this._oComponent.getModel();
this._oSecurityToken = null;
this._oViewProperties = new JSONModel({
  busy: false,
 delay: 0,
  allowedFileExtension: ["jpg", "png", "bmp", "doc", "docx", "xls", "xlsx", "ppt", "pptx", "pdf", "msg"],
 attachmentUploadURL: ""
});
this.setModel(oViewModel, "detailView");
//While binding the view, bind attachment also by calling below method:
_bindAttachments: function(sObjectPath) {
 var sBindingPath = sObjectPath + "/Attachments";
```

```
this._oAttachments.bindAggregation("items", {
   path: sBindingPath,
   template: this._oAttachmentItem,
   templateShareable: true
 });
//update upload url for control
 var_sUploadURL = window.location.origin + (this._oModel.sServiceUrl + sObjectPath) + "/Attachments";
 this._oViewProperties.setProperty("/attachmentUploadURL", _sUploadURL);
// to get xcsrf token, call below function once view is binded, which might used below
  this._oModel.refreshSecurityToken(jQuery.proxy(this._getSecToken, this));
  _getSecToken: function(oData, oResponse) {
   this._oSecurityToken = oResponse.headers['x-csrf-token'];
 },
//UploadCollection events :
onAttachmentChange: function(oEvent) {
```

```
var sFileName = "";
var aFiles = oEvent.getParameter("files");
for (var i = 0; i < aFiles.length; i++) {
 sFileName = aFiles[i].name;
  break;
var oCustomerHeaderSlug = new sap.m.UploadCollectionParameter({
 name: "slug",
 value: sFileName
});
oEvent.getSource().addHeaderParameter(oCustomerHeaderSlug);
// Header Token
var oCustomerHeaderToken = new sap.m.UploadCollectionParameter({
 name: "x-csrf-token",
 value: this._oSecurityToken
});
```

```
this._oAttachments.addHeaderParameter(oCustomerHeaderToken);
},
onAttachmentDeleted: function(oEvent) {
 var sDeletePath = oEvent.getParameter("item").getBindingContext().sPath;
  // logic to implement remove attachment
 //i.e use this._oModel.remove() function by passing above path.
},
onAttachmentRenamed: function(oEvent) {
 // do as per need
},
onAttachmentSizeExceeded: function() {
 // do as per need
},
onAttachmentTypeMissmatched: function() {
 // can be shown message for mismatch
},
```

```
onAttachmentUploadComplete: function(oEvent) {

// just refresh the attachment with updated data

var oItemsBinding = this._oAttachments.getBinding("items");

oItemsBinding.refresh();

}

Thats all !! □
```

http://scn.sap.com/community/developer-center/front-end/blog/2016/03/29/using-the-uploadcollection-to-uploaddownload-archivelink-files-via-gateway

Regards,

Akhilesh

Like 0 | Share



harish vyas August 21, 2017 at 6:58 am

Hello Akhilesh,

I tried this approach but not able to make UploadCollection work.

I have posted a question on SDN, refer to link: LINK

Can you provide some insight if possible. Regards, Harish Like 0 | Share Sagar Patil September 18, 2016 at 10:18 am Hi Faiza, I am able to upload multiple files using file upload collection. I am using FileReader java script object inside onChange() event of uploadCollection control ot get the file details. Regards, Sagar M Patil Like 0 | Share



PEEYUSH RANJAN March 21, 2017 at 12:56 pm

Hello Sagar,

Could you please kindly provide some spinet code for upload the multiple file as you have already did.

Thanks a lot in advance.

Peeyush

Like 0 | Share



# Sharma Chetanya September 28, 2015 at 1:57 pm

Hi Jenish,

Brilliant blog ..

Could you please share your code base via JSBin or else?

One question, why did you used this approach of overriding the existing method? FileUploader.upload()? Just wish to know the reason behind the need of extension, what was your use case? where did you got struck?

Please explain and share the code.

Thanks

Chet

Like 1 | Share



Former Member February 5, 2017 at 10:36 am

Hi Jenish sir,

I am new to SAPUI5 i dont know how to use sap netweaver gateway image services in sapui5. I tried below code in single html page using eclipse but i am getting some errors please correct it revert back to me

```
<!DOCTYPE HTML>
<html>
<head>
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta http-equiv='Content-Type' content='text/html;charset=UTF-8'/>
<script src="resources/sap-ui-core.js"</pre>
id="sap-ui-bootstrap"
data-sap-ui-libs="sap.m, sap.ui.unified"
data-sap-ui-theme="sap_bluecrystal">
</script>
<!-- only load the mobile lib "sap.m" and the "sap_bluecrystal" theme -->
<script>
sap.ui.localResources("csrf_image");
var app = new sap.m.App({initialPage:"idApp1"});
var page = sap.ui.view({id:"idApp1", viewName:"csrf_image.App", type:sap.ui.core.mvc.ViewType.JS});
app.addPage(page);
app.placeAt("content");
</script>
<script>
jQuery.sap.declare("com.ODataFileUploader.Component");
```

```
jQuery.sap.require("sap.ui.unified.FileUploader");
sap.ui.unified. File Uploader. extend ("com. OData File Uploader. Component", \{ adam of the component of t
metadata: {
properties: {
"modelName": "string",
"slug": "string",
 "csrf": "string"
},
upload: function() {
var file = jQuery.sap.domById(this.getId() + "-fu").files[0];
try {
if (file) {
this._bUploading = true;
var that = this;
var _handleSuccess = function(data, textStatus, jqXHR){
```

```
that.fireUploadComplete({"response": "Success: File uploaded to entity" });
that._bUploading = false;
};// end
var _handleError = function(data){
var errorMsg = ";
if (data.responseText[1]){
errorMsg = /<message>(.*?)<\/message>/.exec(data.responseText)[1];
}else{
errorMsg = 'Something bad happened';
that.fireUploadComplete({"response": "Error: " + errorMsg});
that._bUploading = false;
}; // end of handleerror
var oHeaders = {
"x-csrf-token": this.mProperties.csrf,
"slug": this.mProperties.slug,
```

```
"X-Requested-With": "XMLHttpRequest",
"Content-Type": file.type,
"DataServiceVersion": "2.0",
"Accept": "text/plain, */*"
};
jQuery.ajax({
type: 'POST',
url: this.getUploadUrl(),
headers: oHeaders,
cache: false,
contentType: file.type,
dataType: "text",
processData: false,
data: file,
success: _handleSuccess,
error: _handleError
```

```
});
jQuery.sap.log.info("File uploading to" + this.getUploadUrl());
} // end of if file
} catch(oException) {
jQuery.sap.log.error("File upload failed:\n" + oException.message);
renderer : {
});
//end of upload function
//csrf token fetch
var oFileUploader = new sap.ui.unified.FileUploader({
id: "file1",
src:"{Pfilename}",
uploadUrl:"upload/",
});
var url1 = "sap/opu/odata/SAP/ZPROJECT_SHOPPING_CART_SRV";
var csrfToken = "";
```

```
var aData = jQuery.ajax({
url: url1,
headers: { "X-CSRF-Token": "Fetch",
"X-Requested-With": "XMLHttpRequest",
"DataServiceVersion": "2.0" },
type: "GET",
contentType : "application/json",
dataType: 'json',
success : function(data, textStatus, jqXHR) {
csrfToken = jqXHR.getResponseHeader('x-csrf-token');
oFileUploader1.setCsrf(csrfToken);
oFileUploader1.setSlug("200000664_MOB15");
oFileUploader1.setUploadUrl(getUrl("sap/opu/odata/SAP/ZPROJECT_SHOPPING_CART_SRV/ProductimageSet"));
oFileUploader1.upload();
},
error: function(XMLHttpRequest, textStatus, errorThrown) {
```

```
}
});
var btnSubmit = new sap.m.Button("file2",{
text:'Trigger Upload',
press:function() {
var url1 = getUrl("/sap/opu/odata/SAP/ZPROJECT_SHOPPING_CART_SRV/");
var csrfToken = "";
var aData = jQuery.ajax({
url: url1,
headers: { "X-CSRF-Token": "Fetch",
"X-Requested-With": "XMLHttpRequest",
"Content-Type": "image/jpeg",
"DataServiceVersion": "2.0" },
type: "GET",
//jsonpCallback: 'getJSON',
contentType : "application/json",
dataType: 'json',
//data: "",
success : function(data, textStatus, jqXHR) {
csrfToken = jqXHR.getResponseHeader('x-csrf-token');
oFileUploader1.setCsrf(csrfToken);
oFileUploader1.setSlug("2000006");
```

```
oFileUploader1.setUploadUrl(getUrl("/sap/opu/odata/SAP/ZPROJECT_SHOPPING_CART_SRV/ProductimageSet"));
oFileUploader1.upload();
},
error: function(XMLHttpRequest, textStatus, errorThrown) {
});
});
oFileUploader.placeAt("content");
btnSubmit.placeAt("content");
</script>
</head>
<body class="sapUiBody" role="application">
<div id="content"></div>
</body>
</html>
Like 0 | Share
```

# Hi Jenish Prabhu

Actually i am trying to write a logic to upload a xlsx file, and the bind the xlsx data into a table in Sap UI5 Side.

is it possible to do

Like 0 | Share

# Find us on

Privacy	Terms of Use
Legal Disclosure	Copyright
Trademark	Cookie Preferences
Newsletter	Support