

# caArray 036 - Working with Array Design Files in caArray

## Working with Array Design Files in caArray

**Topic:** caArray Usage

**Release:** Up to caArray 2.X

**Date entered:** 12/18/2009

### Introduction

One of the most frequently asked questions from the new caArray users is: "Where can I obtain the array design file for my experiment?". Although the array providers' websites are still the best places to obtain the most updated array design files (for more details, see [caArray 010 - Where are the Array Design Files for caArray?](#) Where are the Array Design Files for caArray?), many array design files are now available to download at the NCI public [caArray server](#), a new feature made available in caArray **version 2.3**.

In this KB entry, we will explain how to download, edit, delete and replace an array design file in caArray.

### Download an existing array design file

After login to caArray, the option to manage an array design will be available in the **Curation** section in the left menu. To select a file to download, follow the steps below:

- Click "Manage Array Design" in the left menu section (Arrow 1).
- All the design files that have been imported into caArray will be displayed in the main data area (Arrow 2).
- Locate the array design file of interest, select "Download" (Arrow 3) to launch the download.

#### Download of an existing array design file

Build CAARRAY\_R2\_3\_0\_GA(17213)|Thu Nov 05 11:14:47 EST 2009 | Node: NCICB | Welcome, linf | Logout

WELCOME TO CAARRAY

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### Manage Array Designs

84 items found, displaying 21 to 40. [First] [Prev] 1, 2, 3, 4, 5 [Next] [Last]

Array Design Name	Provider	Assay Type	Version Number	Feature Type	Organism	Edit	Edit File	Delete	Status	Download
<a href="#">HG-U133A_2</a>	Affymetrix	Gene Expression	2	in_situ_oligo_features	Homo sapiens				Imported	
<a href="#">HG-U133B</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported	
<a href="#">h1av</a>	Affymetrix	Exon	1	in_situ_oligo_features	Homo sapiens				Imported	
<a href="#">h1av_binary</a>	Affymetrix	Exon	1	in_situ_oligo_features	Homo sapiens				Imported	
<a href="#">H-miRNA_8x15K</a>	Agilent	microRNA	2	in_situ_oligo_features	Homo sapiens				Imported (Not Parsed)	
<a href="#">Hs-ATC7.6K-v5px_16Bx22Cx22R</a>	GenePix	Gene Expression	1	spotted_ds_DNA_features	Homo sapiens				Imported	
<a href="#">HT_HG-U133A</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported	

### Upload a new array design file

Any registered caArray user can upload, validate, and import the array designs from a supported array provider. If a desired array design file is not found in the caArray, the user can initiate the file upload into caArray:

- Click **Import a New Array Design** (Arrow 4 in the preceding illustration).
- This opens the **New Array Design** dialog box.
- Enter the appropriate information in the fields provided on **Array Design Details** form.

## New Array Design Dialog with Form Completed

### New Array Design (Step 1)

#### Array Design Details

**Description:** Array Design test file

**Assay Type:**

+ aCGH

+ Exon

+ Gene Expression

+ Methylation

+ microRNA

Selected Assay Type

Gene Expression

**Provider:** Affymetrix

**Version Number:** 1

**Feature Type:** in\_situ\_oligo\_features (MO)

**Organism:** Homo sapiens (ncbitax)

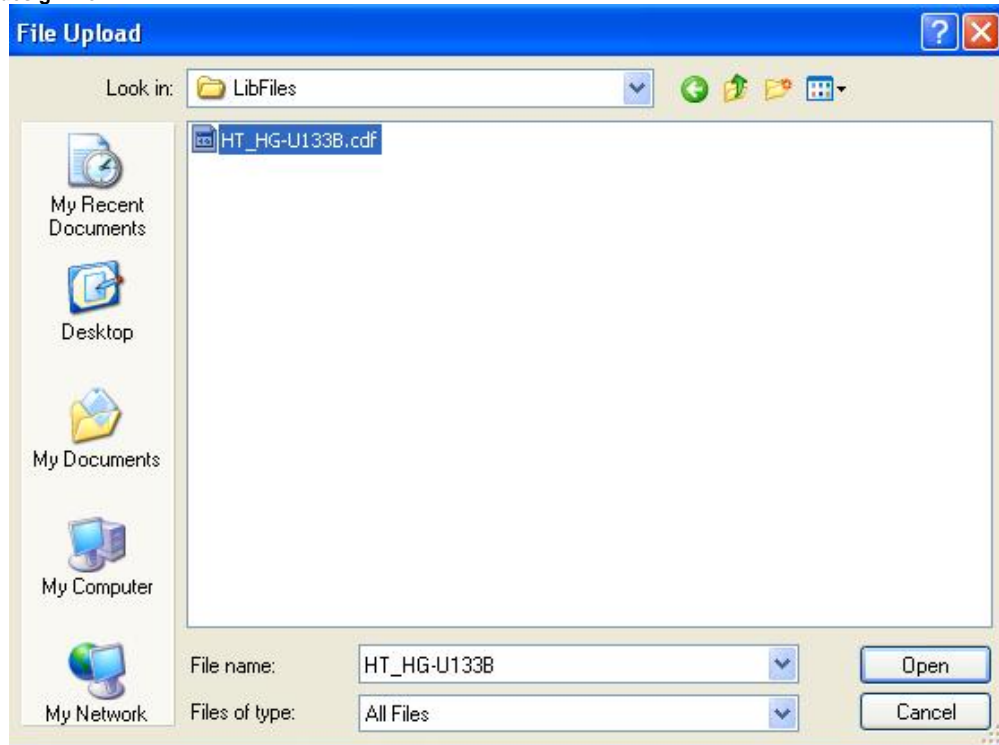
Cancel

Next

The required fields are the Description (Array Design test file in the example), Assay Type (select, Gene Expression in the example), Provider (Affymetrix in the example), Version Number (1 in the example), Feature Type (in\_situ\_oligo\_features (MO) in the example) and Organism (Homo sapiens (ncbitax)).

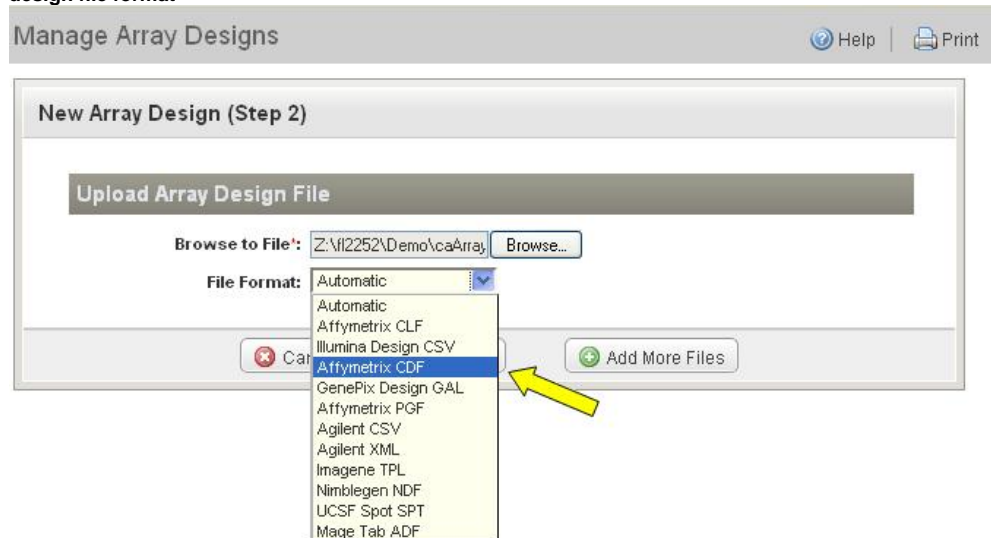
- Click "Next" to select an array design file of interest.

### Selecting an array design file



- Identify the array design file format in the drop-down list.

### Selecting the Array design file format



- Multiple array design Files can be submitted to upload at the same time. Click on "Add More Files" to select a new file. After all of the files are selected, submit the files to upload by clicking "Save".

Submitting files to upload

Manage Array Designs

Help | Print

New Array Design (Step 2)

Upload Array Design File

Browse to File: Z:\i2252\Demo\caArray Browse...

File Format: Affymetrix CDF

Cancel Save Add More Files

Validate an array design file

- After the array design file is uploaded, caArray will automatically initiate the validation process. If the file is from a supported array provider, caArray will mark the file as "Imported" after the validation.

Array Design Files, Imported and Importing (Being Validated)

<a href="#">HG-U133A</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported
<a href="#">HT_HG-U133A</a>	Affymetrix	Gene Expression	1.1	in_situ_oligo_features	Homo sapiens				Imported
<a href="#">HT_HG-U133B</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Importing
<a href="#">HT_Rat230_PM</a>	Affymetrix	Gene Expression	1.0	in_situ_oligo_features	Rattus rattus				Imported
<a href="#">HuEx-1_Q-st-1a1</a>	Affymetrix	Exon	v2	in_situ_oligo_features	Homo sapiens				Imported

- For more information on the different states of the array design files, refer to [caArray 017 - What is the meaning of the caArray Status of Importing - Imported versus Imported Not Parsed?](#), the section "caArray Status of Importing: Imported vs Imported Not Parsed".

Array Design Files, Imported

<a href="#">HT_HG-U133A</a>	Affymetrix	Gene Expression	1.1	in_situ_oligo_features	Homo sapiens				Imported
<a href="#">HT_HG-U133B</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported
<a href="#">HT_Rat230_PM</a>	Affymetrix	Gene Expression	1.0	in_situ_oligo_features	Rattus rattus				Imported
<a href="#">HuEx-1_Q-st-1a1</a>	Affymetrix	Exon	v2	in_situ_oligo_features	Homo sapiens				Imported

Delete, Edit and Replace an array design file in caArray

Delete an Array Design

After data has been imported into an experiment, the array design associated with that data cannot be removed from the experiment's list of array designs. Conversely, once an array design has been imported, the file associated with it cannot be changed. Array designs that are not associated with an experiment can now be deleted. To delete an array design, follow this step:

- On the row corresponding to the array design, click the Delete icon (arrow in the image below).
- A confirmation window will pop up. Once you click the "OK" button, the file will be physically deleted from caArray.

## Array Design Files with Delete Icon and Confirmation Window

Array Designs Import a New Array Design

14 items found, displaying all items.

Array Design Name	Provider	Assay Type	Version Number	Feature Type	Organism	Edit	Edit File	Delete	Status	Download
<a href="#">016436_D_G2_20070426</a>	Agilent	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported (Not Parsed)	
<a href="#">HT_HG-U133B</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported	
<a href="#">HT_Rat230_PM</a>	Affymetrix	Gene Expression	1.0	in_situ_oligo_features	Rattus rattus				Imported	

The page at <http://afapp1.c2b2.columbia.edu:38080> says:

You are about to delete this array design. Please note that large array designs will take longer to delete. Press OK to continue.

OK Cancel

## Edit an Array Design

In caArray 2.2, any logged in user can edit an array design. To edit an array design, follow these steps:

- On the row corresponding to the array design, click the Edit icon.

<a href="#">HT_HG-U133B</a>	Affymetrix	Gene Expression	1	in_situ_oligo_features	Homo sapiens				Imported	
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- The required fields become editable; enter any edits.
- Please note, the editable fields are limited for the array design files uploaded prior to caArray 2.3. Starting with caArray 2.3, all required fields become editable.

## Array Design Details Dialog Open for Editing in V2.3 and V2.2 and Under with Fewer Fields Open for Editing

Manage Array Designs Help

HT\_HG-U133B **A. caArray Version 2.3**

**Array Design Details**

Array HT\_HG-U133B  
Design Name:  
Array URN:LSID:Affymetrix.com:PhysicalArrayDesign:HT\_HG-U133B  
Design LSID:

Description:

Assay Type:  **Selected Assay Type**

Provider:

Version Number:

Feature Type:

Organism:

Cancel Save

Manage Array Designs Help

HT\_HG-U133A **B. caArray Version 2.2 & Under**

Some details of this array design may not be modified because it is already associated with an existing experiment.

**Array Design Details**

Array Design Name: HT\_HG-U133A  
Array Design LSID: URN:LSID:Affymetrix.com:PhysicalArrayDesign:HT\_HG-U133A

Description:

\*Assay Type: Gene Expression  
Provider: Affymetrix  
Version Number: 1.1  
Feature Type: in\_situ\_oligo\_features (MO)  
Organism: Homo sapiens (ncbitax)

Cancel Save

## Replace an Array Design

The only array design file that can be replaced is the one imported without validation and parsing. (For more information on the definition of different file types, refer to [caArray 016 - Which file can be parsed into caArray? What is the benefit of file parsing?](#) Files Recognized by caArray.)

- Find the file that is replaceable (the file with a status of "Imported (Not Parsed)" (circled in red in the illustration).
- Click on "Edit File" icon (Arrow) to activate "Upload Array Design File" Window.
- Browse and find the new array design file.
- Save the new file by clicking the Save button.

The screenshot displays the caArray web application interface. At the top, a table lists array designs with columns: Array Design Name, Provider, Assay Type, Version Number, Feature Type, Organism, Edit, Edit File, Delete, Status, and Download. The first row shows design '016436\_D\_G2\_20070426' from 'Agilent' with status 'Imported (Not Parsed)'. A yellow arrow points to the 'Edit File' icon for this row.

Below the table, a modal window titled 'caArray - Manage Array Designs - Mozilla Firefox' is open. It shows the URL 'http://afapp1.c2b2.columbia.edu:38080/caarray/'. The modal has a section for '016436\_D\_G2\_20070426' with an 'Upload Array Design File' button. Below this, it shows 'Current File: 016436\_D\_G2\_20070426.xml', a 'Browse to File' button, and a 'File Format' dropdown set to 'Automatic'. At the bottom of the modal are 'Cancel', 'Save', and 'Add More Files' buttons.

Please leave your comment in the [caArray End User Forum](#).