**Omnicell Blueprinting Tool Guide  
Omnicell Blueprinting Tool**

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| Date | Description | Revision |
| 9/30/2022 | Initial draft of the User Guide | 1.00 |
| 10/05/2022 | Added a few more stencils to the standard Visio template  Added “Shape Type” : Page Size  Added Stencil shape images | 1.01 |
| 11/09/2022 | Added additional Stencils  Added reverse feature (Create Excel from Visio Diagram) | 1.02 |
|  |  |  |

# Overview

This guide provides comprehensive help and documentation for the latest version of the Omnicell Blueprinting Tool (v1.0.2.1). Omnicell Blueprinting Tool is an aid where automation of Visio Diagrams based on customer-specific configurations. Using an excel file the designer has full control of placing stencils on the diagram as well as how shapes are connected.

## Noteworthy:

* Currently no installer has been created for this tool. However, a simple zip file can be used for the installation
* This tool requires Visio and Excel to be installed on the computer running this tool
* An excel file will be used populated the Visio diagram provided by the users. This data file will contain all the information for placing stencils and connections on the diagram
* Supports multiple Visio pages
* Supports multiple Visio stencil files
* Supports Visio template file. (Template files can contain stencils). Additional stencils can also be attached to the template file

## Tool Installation

* At this time installation of this tool will be performed by extracting a zip file
  + Extracting the zip file will be perform the following
    - Root folder will be created “Omnicell\_Blueprinting\_Tool”
    - Additional sub-folder “Data” will be created under the root folder
    - Three additional sub-folders will be created under the “Data” folder
      * “ScriptData”
      * “Stencils”
      * “Templates”
    - Make a copy of the OC\_BlueprintingDataFile\_Template.xlsx” file. Use the new copy for your project data file

## Tool Folder layout and description

* Brief description of each of the folders and contents
  + - Root folder “Omnicell\_Blueprinting\_Tool” - Applications exe will be placed
    - Under the root folder the sub-folder “Data”
      * Three sub-folders have been created under the “Data” folder
        + “ScriptData” - Excel data files

A sample data file “OC\_BlueprintingDataFile\_Template.xlsx”

Place your project excel data file in this folder

* + - * + “Stencils” – Visio Stencil files

Existing stencil file “OC\_BlueprintingStencils.vssx”

Place any custom project stencils in this folder

* + - * + “Templates” – Visio Template files

Existing template file “OC\_BlueprintingTemplate.vstx”

Place any additional Visio templates created in this folder

Template files should contain stencils as well, this help eliminate the need to call out stencils in the excel data file

## Data File:

* This application will use an excel file formatted in a specific way allowing the designer the ability to specify stencil shapes, labels, fill colors on the Visio Diagram. However, there are a few specific rules which must be followed to get shapes to be drawn.
* Another feature provided by this application is the ability to create an Excel data file based on an existing Visio diagram. However, you will still need to make modifications to the excel data file as some shapes will not be positioned or contain the correct color. Also, some connections may not be correct. (Still being worked on)
* Fastest way to create a diagram would be to use the provided Visio template file that already contains a stencil
* Make a copy of the provided excel data file and start to add your custom components to that file.
* Most of the work will be setting the PosX and PosY values. If you don’t set these values for each stencil image, they will be placed on top of each other.
  + Description of the Excel data file
    - There are four sheets within this data file.
      1. **VisioData** sheet – This is the brain where the user will enter data that will be displayed on the Visio Diagram
      2. **SystemInfo** sheet – Add System information collected from the customers site(s). Not used by the application
      3. **Interfaces** sheet – Add interface information collected from the customers site(s). Not used by the application
      4. **Tables** sheet – Do not make any modifications to this sheet. This sheet contains tables that are used on the “VisioData” sheet
    - **VisioData** sheet
      1. First row is the header. Note: Not all fields in each row need to be populated
      2. Any row where the first column starts with the ‘;’ character will be considered as a comment. (The row will be ignored)
      3. If using the standard provided template file “Data\Templates\OC\_BlueprintingTemplate.vstx” you should open this file in Visio and note all the Stencils that are available. They will be listed towards the bottom of this document as well
      4. VisioData sheet fields description

| **Data file header column** | **Required** | **Description** |
| --- | --- | --- |
| **Visio Page** | **R** | **Visio Page Identifier**  You can specify which page the shape should be placed on if needed. I.E. Enter 1 for page one and 2 for page two etc.  You can also leave this blank and set the Autosize:true (Page Setup)  This will allow the Visio diagram to expand as needed based on stencil positions |
| **Shape Type** | **R** | |  | | --- | | **Shape Type -** Key identifier used by the application for specific actions | | **Page Setup** – user can specify a Visio diagram page size  First part is the Orientation  Second part is Page size  I.e. “Portrait:Legal” = Orientation is Portrait and size is 8.5 x 14  Default is 8.5 x 11 if you don’t specify a **Page Setup** entry  Format is Orientation followed by “:” character followed by page size  Orientation: Landscape or **Portrait** (default)  Size: **Letter** (default), Tabloid, Ledger, Legal, A3, A4 | | **Template** – user can specify a Visio template file to use  If no **Template** entry is present a blank Visio diagram will be created.  **Note**: creating a Visio template file that contains one or more Stencils may be best  Enter the Template full path and name in the “Shape Key” field  Use the “Shape Label” field for adding comments to this entry if needed  No other fields are required | | **Stencil** – user can specify a Visio Stencil file to use  Multiple Stencil files can be added to one Visio diagram  Enter the Stencil full path and name in the “Shape Key field”  Use the “Shape Label” field for adding comments to this entry if needed  No other fields are required | | **“Shape”** – Stencil image to be placed on the Visio Diagram  Note: Additional fields in this row when using this “Shape Type” key | |
| **Unique Key** | **R\*\*** | **Shape Key** – Must be a unique value.  This field must be a unique value within this data file  Its primary use is to make each stencil row a unique row. This value is what will be used when connecting shapes together.  A common format for using this filed can be as follows: use the value from the field “Shape Image” followed by ‘:’ character than another value to make it unique. Like the page number or some Alpha character.  In some cases, there will be multiple rows using the same “Shape Image”. This field is used to keep them all unique.   * + - * + If the same “Shape Key” value is used on a different row the applications will display an error stating a duplicate “Shape Key” was found. This requires the designer to resolve this issue.   Usage example: Display two different footers in the Visio diagram. One on page 1 and another on page 2  Create two rows in the data file, one for footer 1 and another for footer 2. Each footer row will contain a different Shape Key, description as well as PosX and PosY values  Set the value in “Visio Page” to be the page this row will be drawn on  Use the value “footer” for the “Shape Image” field for both entries  Set “Shape key” value for Footer 1 to “footer:1”  Set “Shape key” value for Footer 2 to “footer:2”   * + - * + Another example using multiple “server” shape entries   Each row that contains a “Shape Image” of “server” will need to have a unique “Shape Key” value  “Shape Key” would always start with the Shape image value “server” followed by “:” followed by a unique string  I.E Shape Key = “Shape Image” +”:1-PWRX”  (Production WRX server 1)  I.E Shape key = “Shape Image” +”:1TWRX”  (Test WRX server 1) |
| **Stencil Image** | **R\*** | Stencil image name. Must be exactly name as in the Visio Stencil |
| Stencil Label | O | Text to display as the shape label |
| Stencil Label Font Size | O | |  | | --- | | font size to use with Stencil text | | Font size range 6pt – 14pt | | Supports **Bold**. Append “:B” after font size | | I.E **12:B will use 12pt font and make Bold**  I.E 12 only will use 12pt normal weight | |
| Mach Name | O | At this time this field is not used. Part of Systems query |
| Mach ID | O | At this time this field is not used. Part of Systems query |
| Site ID | O | At this time this field is not used. Part of Systems query |
| Site Name | O | At this time this field is not used. Part of Systems query |
| Site Address | O | At this time this field is not used. Part of Systems query |
| Omni Name | O | At this time this field is not used. Part of Systems query |
| Omni ID | O | At this time this field is not used. Part of Systems query |
| Site\_ID Omnis\_ID | O | At this time this field is not used. Part of Systems query |
| IP | O | If populated this value will be added to the stencil label |
| Ports | O | If populated this value will be added to the stencil label |
| Device Count | O | If populated this value will be added to the stencil label as a count (may be used with number of sites/cab’s) |
| **PosX** | **R\*** | X value to place the stencil image |
| **PosY** | **R\*** | Y value to place the stencil image |
| Width | O | Width to increase/decrease the stencil image (normally is 0.0) |
| Height | O | Height to increase/decrease stencil image size (normally 0.0) |
| Fill Color | O | Fill options (**Blue, Cyan, Gray, Green, Light Blue, Light Green, Light Orange, Orange, Red, Yellow**)  **Note: some stencil images can’t be filled** |
| RGB Fill Color | O | This is used if the color you need is not available you can enter the RGB value to be used. I.E RGB(128,128,128) is the format needed |
| Connect From | O | Blank if this object is not connecting  Otherwise, should contain the Shape Key value to the object to connect from |
| From Line Label | O | Text to display as the connector label |
| From Line Pattern | O | Connection line pattern - Supports (**Solid, Dashed, Dotted, Dash\_Dot**)  Default is Solid (Blank value) |
| From Arrow Type | O | Specify is Arrow(s) are to be used with connectors  Default is no arrows (Blank value)  Supported values (**“”**, **Start, End, Both**) |
| From Line Color | O | Connector line color. Default is Black (Blank value)  Supported Colors **(Black, Blue, Cyan, Gray, Green, Light Blue, Light Green, Light Orange, Orange, Red, Yellow)** |
| Connect To | O | Blank if this object is not connecting  Otherwise, should contain the Shape Key value to the object to connect to |
| To Line Label | O | Text to display as the connector label |
| To Line Pattern | O | Connection line pattern - Supports (**Solid, Dashed, Dotted, Dash\_Dot**)  Default is Solid (Blank value) |
| To Arrow Type | O | Specify is Arrow(s) are to be used with connectors  Default is no arrows (Blank value)  Supported values (**“”**, **Start, End, Both**) |
| To Line Color | O | Connector line color. Default is Black (Blank value)  Supported Colors **(Black, Blue, Cyan, Gray, Green, Light Blue, Light Green, Light Orange, Orange, Red, Yellow)** |

**R\*** - In some cases this field may not be required. I.E., when the Shape Type is “Template”, “blank Document”, “Stencil”. However, this field is required when the Shape Type is ‘Shape”

**R\*\*** - The shape Key field has may not need to be unique under this condition. When the Shape Type is any of the following “Template”, “Blank Document”, “Stencil”

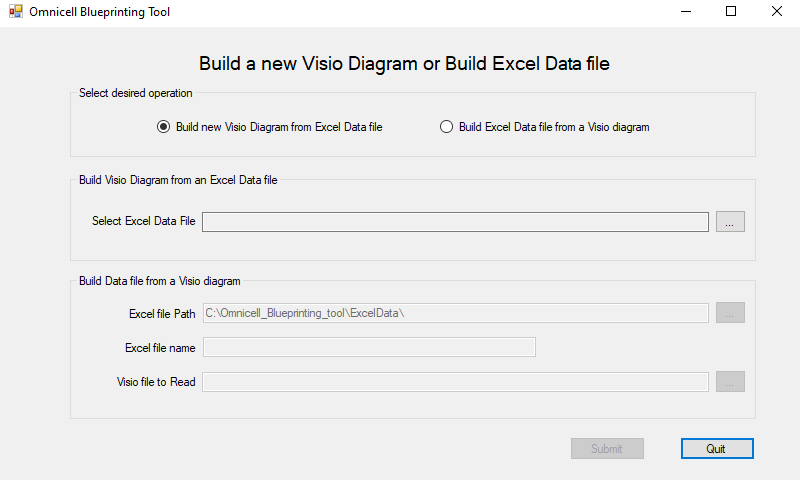
**Note**: the excel data file template columns in Red are required

## Provided Visio Template Stencil Names

| **Stencil Image name** | **Stencil description - Note all shapes can be resized if needed** |  |
| --- | --- | --- |
| OC\_AIO | AUI device shape |  |
| OC\_AWS | AWS device shape |  |
| OC\_BlisterPackager | Blister Packager device shape |  |
| OC\_Carousel | Carousel device shape |  |
| OC\_Carousel2 | Carousel2 device shape |  |
| OC\_CustomerService | Customer Service shape |  |
| OC\_CPM | CPM device shape |  |
| OC\_CSM | CSM device shape |  |
| O\_DB | DB shape |  |
| OC\_DashOutline | Dash line border. Used for outline. Similar to IconKey shape |  |
| OC\_Devices | Device’s shape |  |
| OC\_EHRSystems | EHRSystem shape |  |
| OC\_Footer | Footer section to be populated by the user if using this stencil |  |
| OC\_Firewall | Firewall shape |  |
| OC\_Group1 | Large light blue filled shape (shaded)  Can be sized and color filled if needed |  |
| OC\_Group2 | Small light blue shape  Can be resized and color filled if needed |  |
| OC\_Group3 | Group with pre-filled top Omnicell green and clear bottom. Can add additional shapes to this shape |  |
| OC\_Group4 | Group using an orange fill color.  However, you can set the fill color to any color |  |
| OC\_IconKey | Preset with 3 servers |  |
| OC\_IconKey2 | Just the outline you can populate the inside and change the size |  |
| OC\_IVX | IVX shape |  |
| OC\_Label1 | Small label type Stencil |  |
| OC\_LineLedgen | Rectangle like box that can be sized, and color filled. Text on right size |  |
| OC\_Logo | Omnicell Logo shape |  |
| OC\_Ethernet | Large vertical alighted shape (large size) |  |
| OC\_Ethernet2 | Small vertical alighted shape. Note this is vertical so the sizing is not like a horizontal stencil |  |
| OC\_Ethernet3 | Horizontal Network aligned shape |  |
| OC\_OISInterfaces | OIS interface shape |  |
| OC\_PC | PC shape |  |
| OC\_PortsLDAP\_info | Ports / LDAP info shape |  |
| OC\_Process | Process with shading |  |
| OC\_Rectangle | Rectangle with shading |  |
| OC\_Rectangle2 | Rectangle not shaded |  |
| OC\_Rectangle3R | Rectangle not shaded with round corners |  |
| OC\_Square | Square with shading |  |
| OC\_Square2 | Square with no Shading |  |
| OC\_Database | Tube shape round ends with shading |  |
| OC\_Database2 | Tube shape round ends not shaded |  |
| OC\_File | Folder shape with shading |  |
| OC\_File2 | Folder shape no shading |  |
| OC\_Server | Server shape can be resized, and color filled |  |
| OC\_Server2 | Rack mount server no DB. No color fill |  |
| OC\_Server3 | Rack mount server w/DB. No color fill |  |
| OC\_Site | Site shape |  |
| OC\_Supply | Supply Cabinet |  |
| OC\_TabelCell | Small rectangle that can be used to build a table like excel. Example of use may be showing the interfaces. You may need to columns and rows you can use this shape to construct this.  Add text and color |  |
| OC\_TableCell2 | Rectangle with a light outline can be used like a test box |  |
| OC\_TagLabeler | Tag Labeler |  |
| OC\_Title | Title shape with set font sized for each row |  |
| OC\_vSuite\_EMM | vSuite and EMM |  |
| OC\_vSuiteCloud | vSuiteCloud |  |
| OC\_XR2 | XR2 Robot |  |
| OC\_XT | XT cabinet |  |
| OC\_YuyamaPackager | Yuyama Packager |  |

## Running the Blueprinting application

* This tool has two modes of operation
  + Building a Visio diagram using an Excel Data file
    - “Build new Visio Diagram from Excel Data file”
  + Building an Excel data file from a Visio diagram
    - “Build Excel data file from a Visio diagram”



* Selecting the “Build new Visio diagram from Excel data file option”. The tool will process an Excel file as described above that contains specific information for placing stencils in a Visio diagram.
  + You will need to select the excel data file to process
* Selecting the “Build Excel Data file from a Visio diagram” option, the tool will process the selected Visio diagram and produce an excel data file that can be modified by the user and processed by the blueprinting tool using the option “Build new Visio Diagram from Excel Data file”.
  + Some of the modifications may deal with Stencils. The user may need to add the custom stencil file to the excel data file or may need to create this custom stencil file.
  + All shapes from the Visio diagram must exist in a stencil file.

## Sample data file breakdown

Header

Comment

Stencil definition to add

Shape to draw on Page 1

Shape to drop on Page 2

Use Font size 10pt and Bold

Shape to drop on Page 2

Shape to drop on Page 2

Shape to draw on Page 1

Stencil definition to add

Comment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Visio Page | Shape Type | Shape Key | Shape Image | Shape Label | Shape Label Font Size |
| ; Configuration |  |  |  |  |  |
| 0 | Stencil | C:\Omnicell\_Blueprinting\_Tool\Data\Stencils\OC\_BlueprintingStencils.vssx |  | Custom Stencil for OmniCell Architech Visio Diagram |  |
| 0 | Stencil | C:\Omnicell\_Blueprinting\_Tool\Data\Stencils\Advocate\_CustomStencils.vssx |  | Custom Stencil |  |
| ;Visio Section |  |  |  |  |  |
| 1 | Shape | Logo:1 | Logo |  |  |
| 1 | Shape | Title:1 | Title | Project Title Description CSN=###### |  |
| 1 | Shape | Footer:1 | Footer | Key points: • | 10:B |
| ;comment Below is an example of page2 Note: "Page" and "Shape Key" values have changed |  |  |  |  |  |
| 2 | Shape | Logo:2 | Logo |  |  |
| 2 | Shape | Title:2 | Title | Project Title Description CSN=###### |  |
| 2 | Shape | Footer:2 | Footer | Key points: • | 10 |

Stencil fill color

Stencil drop location (PosX, PosY)

Stencil size Width

Stencil size Height

# of devices. This text will be added to the label

Port value will be added to label

IP value will be added to label

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| IP | Ports | Devices Count | PosX | PosY | Width | Height | Fill Color |
|  |  |  | 0.250 | 10.750 | 0.000 | 0.000 |  |
|  |  |  | 3.125 | 10.750 | 0.000 | 0.000 |  |
|  |  |  | 0.25 | 1.75 | 0 | 1.125 |  |

Connect From Line Color

Arrow Type

Line pattern

Line Label

Shape Key value to connect to

Note: At times a shape needs to connect to two shapes use the “Connect From” for this means

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Connect From | From Line Label | From Line Pattern | From Arrow Type | From Line Color |
|  |  |  |  |  |
|  |  | Solid | None |  |
|  |  | Solid | None |  |

Connect To Line Color

Arrow Type

Line pattern

Line Label

Shape Key value to connect to

Note: for single connections use the “Connect To” section

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Connect To | To Line Label | To Line Pattern | To Arrow Type | To Line Color |
|  |  |  |  |  |
|  |  | Solid | None |  |
|  |  | Solid | None |  |

Not used

Will be added to Label

Not used

Not used

Not used

Not used

Not used

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| mach\_id | site\_id | site\_name | site\_address | omnis\_name | omnis\_id | site\_id\_omnis\_id |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## User feedback

* Oct 4, 2022 -