



VIRTUAL TOUR CREATION GUIDE



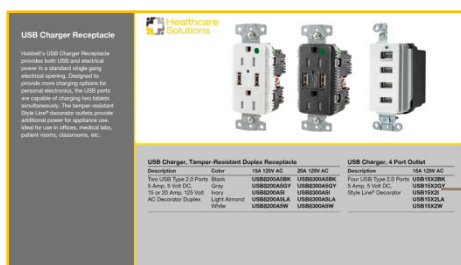
Heathcare eTour



What is an eTour?

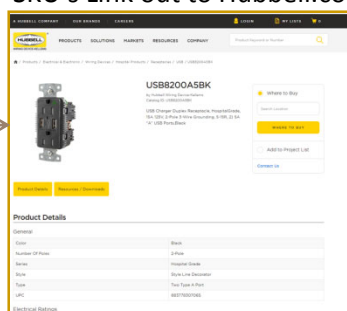
An eTour or "virtual tour" is a marketing tool which leverages virtual reality technology by allowing users to explore Hubbell products in the context of large 3D industrial, commercial or institutional spaces. Facilities like colleges, hospitals and commercial buildings feature a number of unique spaces where a vast number of Hubbell lighting, wiring, datacom, and pre-finish products can be utilized. Hubbell eTours seek to create an ideal facility or building in 3D and then allow users to drill down and explore spaces or technologies that are of interest in such a facility.

The eTour technology allows users a full 360° view of photo realistic environments, with hotspot icons indicating Hubbell products for investigation. Clicking product hotspots reveal product landing pages which feature product imagery, product descriptions and even SKU's. Representing the final step in the exploration process, specific SKU's on these pages are linked back to product pages on the Hubbell website for ordering or distributor information. In this way, an eTour can be viewed as a interactive front end to the Hubbell product catalogs which help market and demonstrate potential applications in which our products can be used.



Product Page with SKU's

SKU's Link out to Hubbell.com





Getting Started

Virtual tours require a high degree of preparation and good communication between the Hubbell product divisions in order to ensure success. An obvious first step in the process is determining the market vertical or facility type the tour is going to cover. Are you looking to virtualize an amusement park? A Healthcare campus? A college? A bottling plant?

Once the subject of the eTour has been determined, The next step is deciding which internal spaces provide the best opportunities for product placement. Bathrooms? Datacenters? Offices? Conference rooms? Waiting rooms? Class rooms? Depending upon the subject of the tour, research should be done into what key spaces need to be represented. This process requires input from each of the divisions, as certain spaces may represent key opportunities for one division, but not others. As the aim of the virtual tour is often to show the depth and breadth of Hubbell products, it is important to communicate between divisions when hammering out the list of spaces. For instance, a utility closet may not represent an ideal product placement opportunity for Hubbell Lighting, but it certainly represents a great many opportunities for grounding & bonding, Premise, and Wiring. In addition, the tour should not feature spaces with repetitive products. If an office and a classroom feature the same product, then pick one or the other. A concise list of quality spaces, that represent the greatest breadth of Hubbell products is the ultimate goal.

We have the Facility and spaces chosen - Now what?

Once all divisions have given their input and the spaces are set, the tour is ready to for a matrix document to be created. The eTour Matrix is the single most important tool for driving efficient production of an eTour. Depending on the level of interactivity needed in the eTour

The Matrix

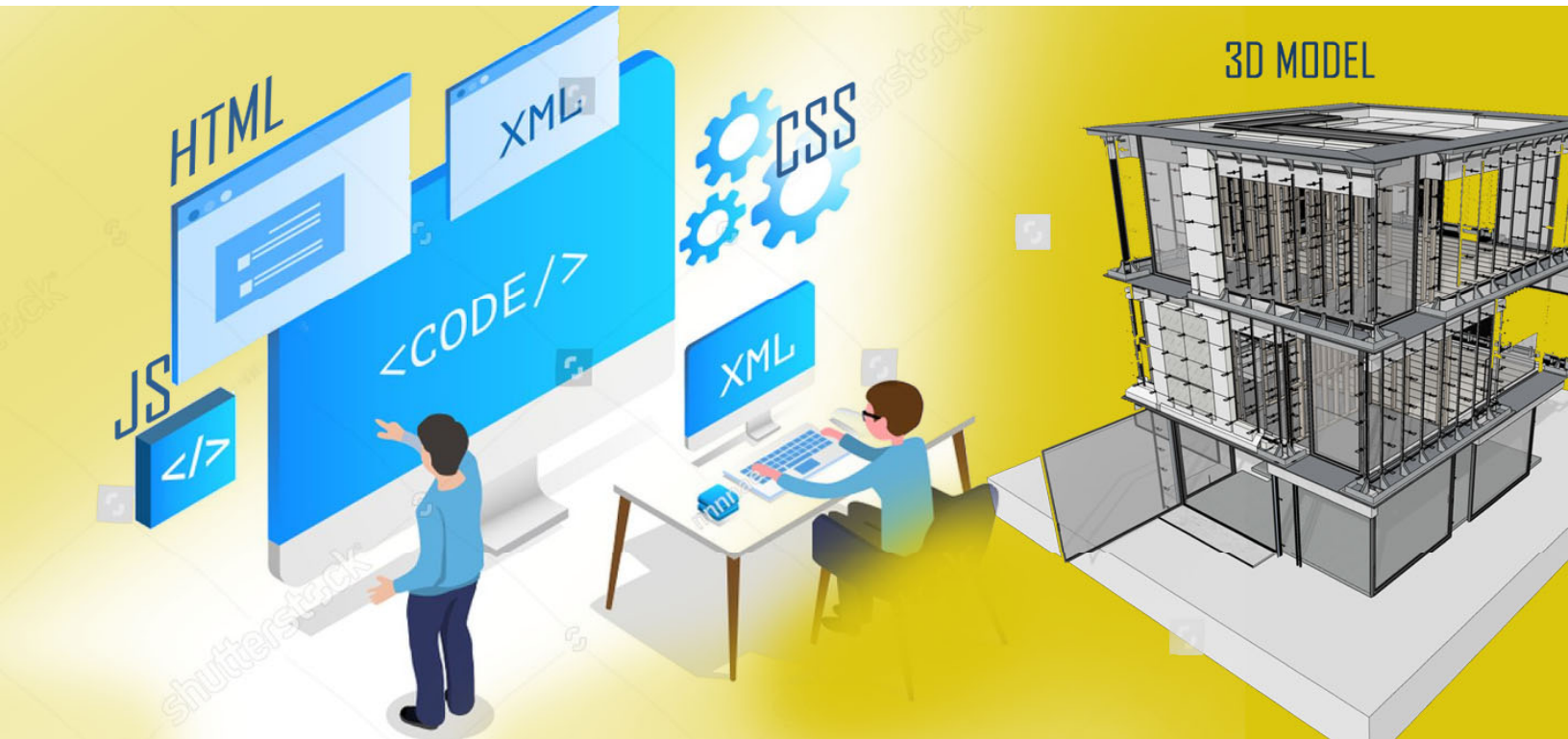
[illegible]

The matrix document should answer most key questions for the production team. A good matrix will list allow a user to cross reference spaces with products placed within them, it should feature all artwork labeling, provide links for all listed product page SKU's, as well as any customization notes to individual spaces like requestes to filtering by product type, night/day mode or finished vs. construction phase modes.

The matrix should also feature an individual sheet for each unique space. These sheets should featuring rough space imagery and product placement cues and product sizing indicators. Above you see the second sheet feature a space render, with reference icons that correspond to the product list below. If renderings are not yet complete, then photographic reference material will suffice in the short-run. Matrix Templates will be made available in the production hub for the eTour, and collaborative inputs, updates and revisions should all take place on a single master document that resides in the Microsoft Teams Hub as established by the Hubbell project champion.

One of the biggest hindrances to a smooth eTour production cycle is email. Volumes of emails from different project managers containing revisions and resources ultimately create chaos and confusion for a production team. Therefore, all change orders, notes, and requests need to be channeled through the Microsoft Teams Hub, and the matrix document, with appropriate alerts when a change order has been logged in.

How is an eTour Built



Describing how an eTour functions to the average person can be a challenge, but describing the technologies under the hood of such a tour can be even more confusing. That being said, Hawley Creative believes there is value in educating Hubbell teams as to the fundamental production process and the layers of technology involved in creating an eTour. Having a conceptual education on how a tour is built can lead to a better understanding of how and why seemingly small revisions can create major headaches when proposed too far downstream.

Code Used


An eTour uses XML extensively to organize and create interactivity within the tour. Thousands of lines of XML code are used to define spaces, and create a 3D experience through the use of panoramic HDRI renders. Overlaid menus, hotspot buttons and product pages are further defined by the use of CSS scripts, Javascript, and HTML. All of these technologies work together as a portable application, and an entire eTour can be zipped up as one directory and dropped onto any web server with full functionality and without the need for any underlying server technologies

3D Environment Building and Rendering

Equally important to code, the creation of the ideal virtual environment requires extensive use of 3D models in conjunction with specialized rendering software that simulates photo realistic lighting, texturing of objects and lens distortions.

Product Page Creation

Product Image



Circuit Guard® 30A Ground Fault (GFCI)

Hubbell's Hard Wired Circuit Guard® 30 Amp GFCIs are UL Type 4X rated with an industrial-grade construction to support a variety of equipment, applications, and environments.

Available in automatic or manual reset, these hard-wired GFCIs feature a green power-on indicator light and a red blinking power-off indicator light with optional audible alarm for fast and easy maintenance. Designed to last for 10,000 cycles (6000 with load and 4000 without load), Hubbell Hard-Wired 30-Amp GFCIs reliable trip upon loss of neutral or if ground and neutral touch at the load side.

Description	Voltage	Alarm	Manual Set	Automatic Set
Hard wired, manual set and automatic set GFCIs.	120V AC	None	GFHW13005	GFHW13105
	120V AC	Audible	GFHW13015	GFHW13115
	240V AC	None	GFHW23005	GFHW23105
	240V AC	Audible	GFHW23015	GFHW23115
	120/240V AC	Audible	GFHW33015	GFHW33115
	3Ø 250V AC	None	GFHW530	GFHW531
	3Ø 120/208V AC	None	GFHW430	GFHW431

Product Description

SKU's

981pixels

550 pixels

Product pages can be created internally, or by Hawley Creative. If created internally, they should be created as 981x550 pixel Jpegs, with high quality compression. All text should be embedded in the artwork. Background color scheme templates will be made available in the production portal and should match the overall color scheme of the tour. All SKU's listed should have link information listed in the matrix document to avoid confusion when Hawley Creative codes the wrapper HTML. Hawley Creative can produce these pages, but would need Hubbell to provide all component resources in an organized fashion.

ALL product pages need to be labeled intuitively, with NO Capitalization or special characters ("&") in their file names. The Hubbell servers are very sensitive and will cause program errors if any such characters are present.

In the near future it is likely that these product pages will migrate from a static, image based format into a live text, and adaptively displaying html page. In anticipation of this transition, creation of these types of pages will most likely need to be handled by Hawley Creative, but a new template will be provided to Hubbell in an effort to save time in their creation.

Workflow

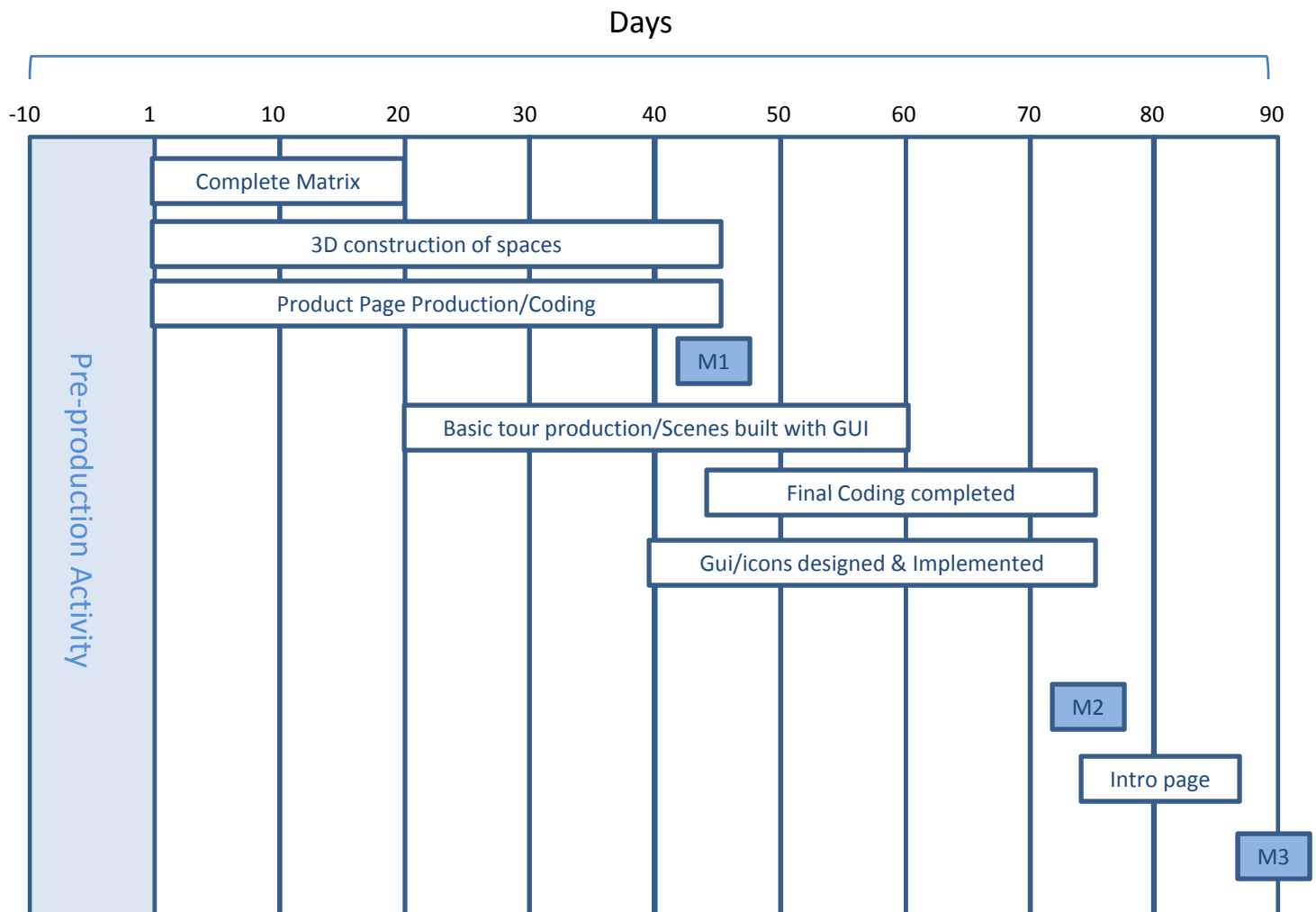


Establishing an efficient workflow is key to a successful eTour production cycle. Use of workflow management software like MS Teams is essential to managing input from the different groups that will need to participate in the eTour production. Disparate Emails to Hawley Creative from many individuals wishing to offer input can lead to a loss of information, and a chaotic revision cycle. It is important that Hubbell select a single project champion who can establish and maintain an information portal on MS Teams in order to filter and organize Hubbell-side information and resources as they come in.

An MS Teams portal for a new eTour should do the following:

1. **Identify all participants** in the eTour production, and give them access to the portal.
2. A **master matrix document** which spells out spaces, links, filtering options per space(by product,day/night) etc?. Document should always represent the most up-to-date information available to Hawley Creative and is the most important document to the process.
3. Have various **file upload areas** for product images or product pages
4. Have **threads established for each space** to be produced, with the ability to upload sample reference imagery, comments and instruction from concept to completion. **Automatic email alerts** should be turned on when new content is loaded to any thread.
5. Meeting calendar should be created and made available, with project milestones listed as events.
6. A live link to the most current version of the project should be available for all participants to view progress.

Typical Production Cycle | Milestones



Pre-production Activity: Before Hawley Creative can initiate production of an eTour, Hubbell will need to identify the vertical Marketing Subject of the eTour, and a list of ALL spaces that are to be represented. MS Teams portal established and ready. With a such a tight deadline, the 3D creation of the spaces will be time consuming, so a complete list will be important, as well as preliminary visual source materials in the form of stock imagery or web references that identify key characteristics of the spaces.

Day 20 Matrix is complete. All product pages have been identified. All links are present. Any space product filtering is identified and labeled (wiring, premise, grounding & bonding etc.) Roadmap forward is set.

Milestone 1: Day 45, all spaces have been rendered at rough/production level, all product pages are built, and products are located and noted in the space. The live link will reflect a live tour with all components present, but in rough form. No space revisions possible from this point forward.

Milestone 2: Day 75, all spaces have Final renders, All product pages finalized and loaded, Menu's, Icons and overall functionality is reviewed and approved. Final Code in place

Day 75-90 Intro information/Help screen added.

Milestone 3: Files are submitted to Hubbell for placement on server.

