



ROLLOUT OF GUARDIAN AT HDR

How HDR Successfully Implemented Guardian for Over 1,600 Revit Users

AT A GLANCE

CHALLENGES

- Deploying at scale
- Driving adoption
- Converting naysayers

RESULTS

- Increased awareness
- Improved consistency
- Reduced mistakes
- Allow flexibility



"It was important we develop a communication plan on what Guardian was, what it did, and most importantly, what it didn't do."

CHRIS SHAFER

HDR

BACKGROUND

HDR is a large architecture and engineering firm with more than 200 locations across the globe. Their goal was to improve consistency of their standards and quality of their Revit models. HDR partnered with Guardian to successfully deploy the Revit add-in to over 1,600 designers.

THE CHALLENGE

Implementing a new technology across a company isn't always easy. Pushback can come from all angles, including leadership, the IT department, and endusers. Rolling out a software to a large number of users requires strategic planning.

Along with a new software deployment, you also have to plan for adoption. Installing the software on computers is one thing, but getting users to buy in can be another.

THE RESULTS

Increased Awareness

Design teams developed an awareness of how Revit properties impact the graphic output of Revit.

Improved Consistency

Guardian has provided HDR with the means to clearly define and enforce their processes and standards.

Reduced Mistakes

Everyone makes mistakes and Guardian is there to catch them before they become problems.

Allows Flexiblity

Guardian is highly customizable, which ensures the project team is in control of how Guardian is utilized.

Q&A with Chris Shafer: Former Design Technology Director at HDR Explains the Rollout of Guardian

HOW DID YOU APPROACH THE ROLL OUT OF GUARDIAN AT HDR?

There were three aspects of the rollout for Guardian:

- 1.Deployment 2.Setup
- 3.Communications

With respect to software deployment within HDR, our IT Group (ITG) is responsible for packaging and deploying all new software. But I'm responsible for providing ITG with installation files, security certificates, and any other information; in Guardian's case, the Company ID. And, of course, if installation directions are available, providing ITG with those goes a long way. Guardian's installation directions were easy to follow as Guardian itself was incredibly easy to install.

Our timing was extremely fortunate because we first adopted Guardian alongside a major effort to reestablish our graphical and Revit standards. Being an early adopter of Guardian, back when Guardian was just Project Properties, we were able to go through the process of updating all our templates and families, totaling roughly 15,000, with the help of Guardian. This taught Guardian how to convert, or "map," using Guardian terminology, all our previous standards to the new standards. By doing so, Guardian was instrumental in helping project teams automatically adopt the new standards without worrying about old content making its way into the project and altering the new graphical and Revit standards.

But let's face it, after 15 years of users having free rein of Revit, there was a perception that Guardian was now imposing restrictions. It was important we develop a communication plan on what Guardian was, what it did, and most importantly, what it didn't do. We focused on how Guardian protects HDR's graphical and Revit standards, prevents mistakes before they happen by providing messages about best practices or potential risks associated with particular commands, and protects completed work with protected pins and families. Lastly, we emphasized that Guardian is highly customizable for each project, which ensures the project team is in control of how much or how little Guardian is utilized.

HOW DID YOU MANAGE THE ADOPTION SIDE OF GUARDIAN?

That's a great question as adoption is very different than deployment or rollout. Adoption is really about how to get users to buy into Guardian. We did a strategically targeted adoption by starting with our largest projects that had our best BIM managers and employed the largest number of users. This ensured we had properly trained leadership who could guide users and accurately oversee the overall effectiveness of Guardian for the project. Because HDR routinely designs and executes very large hospital projects that will have 50–75 Revit users, we quickly got Guardian to the majority of our users. From there, we spent a couple years expanding adoption by word of mouth until the Guardian Backstage data demonstrated how successful and cost-effective Guardian was for HDR. Now Guardian is mandatory for all projects.

WHAT DO YOU THINK WAS THE MOST CRITICAL ASPECT OF THE ROLLOUT?

Communications, communications, communications. From Day One we have been relentless with our communications to ensure our users are hearing about the benefits of Guardian and the positive outcomes of its use on projects. In addition, communicating that each project can be in control of Guardian as they see fit has helped to demystify that Guardian is just a tool – it doesn't control what users can and cannot do.

The "Big Brother" users, or people who don't like the idea of being "tracked," are tough to respond to. I tell those individuals that Revit journal files have been capturing each and every command executed by Revit users since the beginning of Revit itself. The data has always been there, but now we're making use of it.

I COULD IMAGINE THERE BEING NAYSAYERS; HOW DO YOU ADDRESS THOSE CONCERNS?

I have found there are two types of naysayers: the "Big Brother" users and the power users who think they don't need Guardian.

The "Big Brother" users, or people who don't like the idea of being "tracked," are tough to respond to. I tell those individuals that Revit journal files have been capturing each and every command executed by Revit users since the beginning of Revit itself. The data has always been there, but now we're making use of it. Guardian captures some of these same data points, and we're examining this data to better understand how our users are working in Revit and how we can better train them. There is also a trust aspect to it as well. HDR is a very large company, and I try to do as many in-person training sessions on Guardian as possible, as well as webinars to capture those that I miss. I put myself out there as the face of Guardian.

The power users – this is an easy one. They say that Guardian slows them down. Yes, Guardian will slow them down by 5–10 seconds on about 5% of the commands they execute. But I remind them that as power users, they are usually the ones who end up responsible for fixing the mistakes of the more inexperienced Revit users. Guardian helps prevent mistakes and so, in the aggregate, provides more time for the power users to execute their own work and not play cleanup.

WHICH GUARDIAN FEATURE DO YOU THINK YOUR USERS ARE MOST EXCITED ABOUT WHEN THEY ARE FIRST INTRODUCED TO GUARDIAN?

It's hard to say just one. I'll list the top three: Protected Pins, Parameter Prompt, and User Commands. So much about the adoption of Guardian is getting users excited about immediate and tangible results. With Protected Pins, we provide relatable experiences about when placed elements, such as grid lines or levels, have been accidentally moved, causing many hours of extra work and in some cases missed deadlines. We emphasize "accidental," as the majority of Revit actions that prompt Guardian are accidental in nature. We all make mistakes, me included, and Guardian is there to help flag those mistakes before they become problems. Users can all relate to these experiences, and sometimes they have their own horror stories of elements being inadvertently moved.

To organize and sort the sheets and views in our projects, we use both a Discipline Code and Sort Code parameter. We utilize a Parameter Prompt to force users to enter the values for each. The users who are sticklers for being neat love it as it ensures their Project Browser is always organized. Users who usually can't care less about clutter can still appreciate being able to find their views and sheets more quickly and easily.

All I have to say about User Commands is "no more exploded CAD files," and everyone rejoices.

WHAT ARE YOUR GREATEST SUCCESSES WITH GUARDIAN?

Here at HDR we've had so many successes with Guardian that I'd like to sum it up with one word; awareness. To successfully implement Project Properties, we had to properly identify and promote our graphical standards in order for our teams to understand what Revit properties they were mapping to.

While most teams understand View Templates and Visibility/Graphic Overrides gives users graphical control over the Revit properties in their models, they weren't aware of how those Revit properties seemed to be endlessly multiplying and out of control. For example, there might be four or five different hatch patterns for soil with each looking vastly different throughout the drawing set. Guardian provided us the means to identify one soil hatch pattern and provide the awareness to teams on how they can control their patterns to a single HDR hatch pattern. Teams developed an awareness of how Revit properties impact the graphic output of Revit and how they can be in control of that graphic output.

A company the size of HDR with over 1,600 Revit users, communicating HDR's processes, standards and best-practices is difficult at best. Guardian's User Commands has provided us the means to clearly state and link to those processes, standards and best-practices within the Command Messages as the user goes to execute those commands. This awareness has led to a noticeable improvement in the consistency and quality of our drawing sets across the many HDR Architecture offices.