



GigaPan Systems - Automated License Key Generation for NetSuite

"When another company failed us on a major implementation, Explore stepped in and rescued the project with speed and grace. Since then, Explore has proven their worth time and time again as trainers, architects, and programmers. Explore is a rare breed in the consulting world: competent professionals who are always available, always deliver, and always are a pleasure to work with."

-Brian Hufft, Controller, GigaPan Systems

Background: GigaPan Systems makes unique camera mounts that allow users to take gigapixel panoramic pictures using most point and shoot digital cameras. The company sells a package which includes both physical hardware (the camera mount) and their stitching software, the combination of which enables users to take incredibly high-quality and high-resolution pictures.

Issue: GigaPan's product required the combination of their camera mount and the Stitching software. The purchase of the camera mount entitled the user to two license keys for installation of the stitching software. Any additional copies of the software would have to be purchased from GigaPan. The license keys needed to be tied to the specific serial number of the device sold in order to work properly. Complicating matters, customers could purchase the GigaPan solution through a variety of sources. This meant GigaPan would not always know the serial number of the device sold to the customer, or that a device was sold to the customer in the first place. GigaPan, therefore, required a solution that would allow for the automated distribution of license keys to customers; that would tie the distributed license key to the serial number of the product the customer had purchased; and that would provide validation and audit capabilities to prevent fraud.

Solution: Explore Consulting worked with GigaPan Systems to create an automated License Key Generation solution to meet the above requirements and integrate seamlessly into GigaPan's NetSuite

configuration. The resulting solution provided GigaPan with both automation and validation, relieving their staff from the time-consuming task of distributing license keys and providing several levels of authentication and process checks to ensure the core business rules are not violated. Because GigaPan had several workflows through which a customer would acquire their product and/or require a license key--including direct purchases from GigaPan; purchases by customers of GigaPan products from big-box retailers; resale between private parties; and the purchase of additional license keys beyond the two allotted with the physical device—the solution needed to accommodate several varying workflows.

The screenshot shows a web form titled "Registration & Download Request" with the following fields and validation:

- First Name: Text (Valid)
- Last Name: Bob (Valid)
- Email Address: test (Invalid: Please enter a valid email address.)
- Serial Number: 12345 (Valid)
- Address: Serial Number Questions? (Link)
- City: (Empty)
- State: (Empty)
- Zip: (Empty)
- Recieve Newsletter:
- Request: (Button)

 A "Serial Number Help" popup is open, stating: "Imager serial numbers are located either inside the battery door, or on the base of the Imager near the tripod mount. Please enter all letters and numbers listed, which may include "SN". The letter "O" is not used in serial numbers, but the number zero is."

The solution developed by Explore Consulting revolves around a License Key custom record for which a large number of license keys were pre-loaded into NetSuite. This provided a list of unused license keys for

allocation against serial numbers as they were sold or registered with GigaPan.

For those customers who purchase directly from GigaPan, the fulfillment of the sales order triggers the first license key retrieval logic. This scripted logic retrieves an available license key from the pre-loaded list, associates that key with the serial number of the product fulfilled, sends an email to the customer with the selected license key, and flags the License Key custom record as distributed so that it cannot be used in the future with another serial number. The entire process works automatically and requires no human interaction.

Purchases of GigaPan products through big box retailers, however, occur outside the GigaPan web store. To distribute license keys to these customers, Explore Consulting developed a Suitelet, embedded in the GigaPan website, to which customers would be directed, upon the purchase of their product, to register their serial number. Scripted logic on the NetSuite back-end first validates that the serial number has previously been shipped out of NetSuite, and then ensures this serial number has not yet exceeded the two license key limit. If the serial number is both valid and has not exceeded the license key threshold, the script finds an available key, displays it to the customer, and sends a confirmation email also containing the license key. Again, the process happens automatically without interaction from the GigaPan staff. In addition, the validation enforced by the script ensures products which have been lost or stolen from the GigaPan warehouse

cannot be registered, as they have not met the requirement of having being previously fulfilled to a big-box retailer. This helps reduce fraud, and ensures license keys are only distributed for legitimately purchased products.

Finally, Explore Consulting developed a third set of SuiteScript enforced business rules for customers purchasing additional license keys. When the customer purchases a license key through GigaPan's NetSuite webstore, they must supply the serial number of the product they previously purchased. After they have submitted their order, the script detects the purchase of the license key item and immediately generates an email to the customer with the purchased license key. As with the previous workflows, the distributed License Key record is flagged as distributed so it can't be used again, and the entire process takes place without any GigaPan staff interaction.

Results: The solution developed by Explore Consulting provided GigaPan Systems with an automated method for distributing License Keys to customers for the use of their software. The solution eliminates the need for staff to manually interact with each order and communicate directly with each customer. In addition to eliminating those time consuming tasks, the solution provided GigaPan's management with validation to reduce the possibility of the fraudulent distribution of license keys. Finally, because the solution associates the license key with the serial number, GigaPan now has tightly connected audit capabilities for matching distributed license keys with serial numbers of items sold.

About Explore Consulting

Based in Bellevue, Washington, Explore Consulting was founded in 2001 and is a professional services company dedicated to providing innovative and cost-effective solutions for their customers' database and IT systems needs. Having specialized in SaaS solutions for more than 8 years, Explore Consulting is the largest and most experienced NetSuite reseller and solution provider in the Northwestern United States. Not only is Explore a licensed reseller of the NetSuite product suite, but an experienced NetSuite implementation and integration partner. Whether you

are looking for assistance with your NetSuite purchase and implementation or needing to integrate your NetSuite account to any external data source with our industry-leading CloudConnect™ service, we are your one stop NetSuite service provider. Explore Consulting is well-known as a leader in NetSuite customization, integration and extensibility. While NetSuite can run most businesses using out-of-the-box functionality, we're experts on adapting the product to meet your specific business requirements. Explore Consulting was

recently included on the Inc. 5000 list of fastest growing privately owned companies in the U.S. for the third year in a row as well as the Puget Sound Business Journal's 100 Fastest Growing Private Companies. Explore has also been a 5-time NetSuite Star Performer and is well recognized as a leader in integration and mobile solutions for NetSuite. For more information, visit www.exploreconsulting.com.