## CASE SUMMARY

This case study explains how AutoRABIT walked with the client on their journey from struggling with version control issues to achieving continuous integration.. When SunPower came to AutoRABIT, they were exploring the benefits of investing in Continuous Integration(CI) as a practice. They were evaluating a variety of unrelated freeware/open source tools in order to accomplish a homegrown CI solution. They had a team of 40 comprising developers, testers and release managers working in multiple sandboxes. AutoRABIT provided a solution that helped the whole team work together. The solution included the integration and automation of many tools, so that they could easily move towards a true CI solution and eventually moving them towards Continuous Delivery(CD). Today, SunPower is a market leader in CI in the North American Salesforce community and they are likely to be pioneers of CD as practice in 2017.

## BRIEF COMPANY OVERVIEW

SunPower (The Client) has been leading global solar innovation since 1985. The global headquarters of the company is based in Silicon Valley. The company generates more than 18,000,000 MW of solar energy through a diversified global portfolio including residential, commercial, and utility solar energy markets. They have the world's highest efficiency solar panels featuring SunPower Maxeon cell technology and they hold more than 200 patents for solar technology.

## 👍 THE CHALLENGES

**1. Incorrect Commits:** Various members had access to various branches. This resulted in developers not knowing what to commit, how to commit, or when and where to commit. They often committed to an integration branch or unrelated codes.

**2. Parallel Multiple Releases:** The client had multiple releases – blue line, green line and hot fix line. Streamlining parallel multiple releases and ensuring constant sync between the development and release environments was a big challenge.

**3. Multiple Environments:** There were quite a few environments such as SIT, UAT, Staging, Performance, Production, Training, Innovation, to mention a few. The maintenance of these environments was a challenge, especially with many pre-refresh and post-refresh activities that had to be done manually after every production release.

**4. Complex Salesforce Orgs and Heavy Deployments:** The client's Salesforce environments were large and complex, with custom objects, profiles and permission sets, and typical deployments contained a few thousand members.

**5. Environments Out-of-Sync and Challenges with Refresh:** During a release, changes made a few developers often get rejected in UAT phase and are not reflected in production boxes. This makes the developer sandboxes, release environments, and production Orgs go out-of-sync. Further, frequent refresh caused developers to lose their work in progress and also induced a lot of manual steps for the development teams.

**6. Lack of Version Control:** Since multiple development tracks happened concurrently, changes to the shared metadata members, such as Custom Objects and Profiles, resulted in overwriting of code. Further, it was not possible to maintain versions of changes, track them and rollback in the Salesforce environment.

**7. Manual Steps in Migration:** There were many pre-migration and post-migration steps involved in deployments, in addition to large deployment footprint.

**8. Data Migration:** The client had a business model of complex data. The inclusion of a wide range of Salesforce ecosystem- managed packages added more complexity to data migration, with several relationships and circular data references.

**9. Testing Requirements:** The client's Application Release comprised of changes from several projects and exhaustive manual testing of applications, which were time-consuming and error-prone, due to constant changes in UAT environments.

Since coming onboard with AutoRABIT's solution, SunPower has achieved impressive benefits within their release process.

## Access Control List (ACL) & 'EZ-Commits':

With AutoRABIT 's EZ-Commits feature, team members are able to easily check in their code and solve the problem of incorrect commits. The team didn't need to purchase a new version control system as AutoRABIT integrated with their existing tool.

## Best Practices on Automation:

During AutoRABIT's 'Discovery Session' AutoRABIT's customer success team helped to evolve a fine-tuned model, with a combination of EZ-Commits, merge and CI deployments, which was tailored to work effectively in the client's environment.

## Best Practices on Merge:

AutoRABIT implemented best practices for merging branches with GIT, and for resolving conflicts when merging multiple branches.  AutoRABIT's solution enabled SunPower to compare their Salesforce orgs with GIT.

## Data Migration:

Data Loder Pro, one of the advanced features of AutoRABIT,  helped the client overcome the challenge of data complexity in data migration. The client had to just click a button within the AutoRABIT solution to initiate a data migration process.

## RESULTS

## Higher Productivity:

AutoRABIT's Version Control helped the client to streamline their code, deployments, and releases more effectively than before, leading to higher productivity. Approximately 30% of man-hours were spent on manual activities, for a team size of 10. With AutoRABIT, manual effort and other resources were reduced by 30%.

## Better Governance & Auditability:

AutoRABIT's solution enabled better governance and auditability to the client via the elimination of direct access on release sandboxes.

## Time & Cost Saving through Efficient Processes:

AutoRABIT's Data Loader Pro helped the client to achieve process efficiency in data migration by defining a standard set of steps that could be utilized multiple times, thus saving time and recurring costs for the client. Estimated time saved per year is160 person-days on Synchronization of Salesforce Orgs.
100+ successful deployments every day

## Data loading activities:

Data loader Pro helped the client to transfer data from source sandbox to destination sandbox in a more convenient way while automatically handling parent-child relationships.
4Million + Data records migrated

## Achieving CI and CD:

Minimum manual intervention and immediate feedback and visibility of release cycles made continuous integration a reality. With multiple release cycles, SunPower is now focusing on achieving continuous delivery with AutoRABIT.
Time saved in preparing Change sets/ANT scripts - 480 hours

## Test Automation:

The data extraction component separated the data from the test case logic, making the test cases reusable.
The application is expected to have around 40 Test Scenarios covering over 100 screens, and they expect test scenarios will increase by 20% with each release, because they can easily create new test scripts through AutoRABIT.