



NYCB Uses Evolven to Take a Proactive Approach In Preventing and Troubleshooting Issues.

“We use Evolven to know what changed. This enables us to take a proactive approach to release, CCM and IT operations. With Evolven we have cut the number of incidents and post deployment issues, enabling us to provide the best possible service to our customers”.

Mark Psenicka, Enterprise Systems Monitoring Manager, NYCB



IDENTIFYING THE GAP: WHAT CHANGED?

With assets of \$48.5 billion NYCB and hundreds of branch locations, NYCB IT team supports thousands of servers (both physical and virtual) and network devices. To meet business demands, NYCB runs a highly dynamic environment with daily changes and releases.

Although NYCB uses state of the art IT operations and management tools to ensure stability, security and compliance of its environments, they identified a critical gap not covered by existing tools. The IT team at NYCB realized that existing tools could not quickly or efficiently identify for them what changed - the root cause of system outages and performance issues.

NYCB identified that many of their operational issues were the result of inconsistencies (drift) in their environments. These were primarily the result of release discrepancies, undocumented changes in updates to applications provided by vendors, and human error. Identifying those inconsistencies was an arduous manual task that was frequently unproductive since there was little information concerning these types of errors. Sometimes, despite best effort, the issues were never found.

EVALUATING SOLUTIONS THOROUGHLY.

Attempting to bridge this gap, Mark Psenicka, NYCB Enterprise Systems Monitoring Manager, had begun developing in-house solutions, as well as looking at available solutions in the market. He quickly realized that all available solutions suffered from a lack of end to end coverage and analytics, to turn massive amounts of data into actionable insights they could use.

So when Mark first met Evolven, he was intrigued, and very skeptical. In fact, he later told us: "I didn't believe for a minute you could do what you said you could." However that was converted to zeal after using Evolven to solve a real life problem. Shortly after his introduction to Evolven the bank was deploying a major release in the retail banking space. While the deployment was scripted and tested in multiple lower environments, some artifacts were not deployed as expected due to the application complexity. The vendor spent many hours over a holiday reviewing each environment and identifying on a server by server basis what had not been deployed.

To Mark, this seemed like a great test for Evolven. The executive committee agreed and Evolven was given the go ahead to install and detect. In a proof of concept environment, Evolven was tasked with evaluating a deployment in the application's validation environment and comparing it to the production environment. Controlled changes were made to mimic the deployment issue and within minutes Evolven had identified the changes. After seeing Evolven in action, Mark knew Evolven was the answer to NYCB operational challenges related to change.

EVOLVEN AT WORK.

Today, NYCB uses Evolven to manage thousands of servers, network devices and load balancing devices as well as all associated applications and services. The full implementation took less than 6 months.

NYCB uses Evolven to know what changed and take a proactive approach to release, CCM and IT operations. Evolven allowed NYCB to cut the number of incidents and post deployment issues, as well as slash troubleshooting time when something did go wrong.

Evolven has also allowed for greater cooperation between the development teams and the infrastructure teams. Prior to Evolven, Infrastructure was challenged to truly know if it was their changes or developments changes were causing an issue. With Evolven, those questions are answered.

NYCB has empowered the developer's with access to Evolven so they can determine for themselves if changes required for their code releases were deployed as expected.

Reducing the Number of Incidents and Cutting MTTR.

Evolven has had a major impact on the incident prevention and troubleshooting processes at NYCB.

In many cases, the incident can be avoided due to their proactive practices of daily drift management and automated release validation. NYCB IT also has managed to reduce operational overhead in change detection and issue resolution. Previous to Evolven, NYCB would have team members in a war room call with only one or two engineers looking at data and trying to determine what changed.

Today, IT operations and the application teams all see the same data and look to Evolven first to see what changed, eliminating many of those multi-legged calls and rapidly solving the "what changed" dilemma.

In many cases, Incident investigation went from root cause never being identified--mostly due to lack of time to dive into what had happened-- to knowing the root cause in minutes with Evolven.

Real Life Stories

"I was attempting to retrieve some historical information from our APM tool on a specific group of servers. On two of those servers there was only a subset of data being returned from the agents. I was able to determine that the data collection had stopped on June 30th. With the Evolven toolset I was able to query the servers for changes just prior and after the June 30th windows. The results were changes clearly identified as part of our monthly server patching process. Reviewing the patches identified by Evolven I was able to quickly identify the root cause of my APM agent issue within 5 minutes. Without Evolven, I would have spent hours or days pouring through application logs or working with the vendor to identify the root cause."

Deployment Validation and Drift Detection.

Before implementing Evolgen, the release process entailed everyone on the release team starting at midnight to deploy. When the deployment completed, the team would smoke test the application prior to notifying the testing team they were clear to log in and begin in depth regression testing. It was during this round of testing that deployment issues were often discovered which delayed final release of the applications.

Using Evolgen, manual and automated deployments are now automatically validated, and inconsistencies across server farms identified in minutes. The release teams run reports in Evolgen to make sure everything deployed correctly and have a high level of confidence the deployment was successful before calling in the regression testing team.

Detect Unauthorized Changes.

Although there is no tolerance for unauthorized changes at NYCB, changes do happen that are not documented in the change control workflow. NYCB is now using Evolgen to validate all changes and ensure that what actually changed matches a change request. These unauthorized changes are quickly identified, evaluated, and mitigated.

Disaster Recovery Environment Consistency.

NYCB has also been able to improve the pre DR testing validation process. Previously a disaster recovery exercise might fail due to system inconsistencies between the production and DR environments. With Evolgen, environments are continuously evaluated to ensure any changes in production are replicated exactly to the disaster recovery areas. The result is a significantly probability of a successful and expeditious DR test. Most importantly, DR readiness is ensured on a continuous basis in the event of a true disaster situation, not just right after a test.

Real Life Stories

“Evolgen was initially rolled out to our most critical applications. These infrastructure and applications are highly complex with significant redundancy to ensure a very high quality customer experience. The infrastructure is painstakingly reviewed and tested to ensure all servers and applications are identically configured and deployed across large server farms. This was a manual process prior to the Evolgen implementation. After the implementation of Evolgen on these systems, running some of our first analysis plans, we identified a single frontend server for which a code update did not complete properly. While the application still functioned overall, the features and code fixes from the previous deployment were not installed on that server. This produced an inconsistent customer experience. We were able to remove the server from rotation and take corrective action immediately.”

About New York Community Bank

With assets of \$48.5 billion, **New York Community Bancorp, Inc.** is the holding company for **New York Community Bank**, a New York State-chartered savings bank serving customers throughout Metro New York, New Jersey, Florida, Ohio, and Arizona; and **New York Commercial Bank**, a New York State-chartered commercial bank serving consumers and businesses in the New York City boroughs of Manhattan, Queens, and Brooklyn, and the counties of Nassau, Suffolk, and Westchester – all in New York.