

CASE STUDY

Alight Implements Secure, Holistic Self-Service Messaging



Alight Solutions, the global provider of integrated benefits, payroll and cloud solutions, had been in a “make it work” situation with its MQ monitoring and management for over a decade, an approach that could no longer satisfy the performance and security needs for its rapidly growing environment.

Before digging into the solution, a little history: The company, which at the time was Hewitt Associates before its merger with Aon and subsequent spinoff into Alight, implemented a monitoring product for its IBM MQ environment. However, from the team’s installation of pieces that didn’t work to its inability to get the project past the company’s security audit, the solution they initially chose proved to be a nightmare from the outset and was never fully implemented across the company, according to Raymond Powers, then Messaging Architect and Senior Systems Administrator for Middleware.

In the end, the payoff for the project was not enough to outweigh the effort it took to deploy, particularly on the distributed platforms, where it needed to be installed manually on each host, using the super-user account. Security remained an issue, and the organization had to run two different versions of the monitoring product for it to work with the disparate groups that needed to be managed: the older version on distributed platforms (such as Unix and Windows) and the newer version on the mainframe.

COMPANY

Alight Solutions is a leading provider of integrated benefits, payroll and cloud solutions

- Number of employees: 15,000+
- Users: 50+
- 78 offices in 29 countries.
- More than 3000 client

CHALLENGES

- Sensitive data required the solution to meet security compliance audits.
- Unforeseen vulnerabilities in existing solution.
- Existing solution was time and resource consuming, with compatibility issues.
- Previous experience of extended implementation times with existing solution was unacceptable.
- Complex, legacy scripts needed to coexist with any new solution that was implemented.

SOLUTION

- Infrared360’s single, secure interface provided one solution that monitors all queue managers across all platforms
- Agentless management, monitoring, alerting, and message testing, with group/role-based permissions and audit trails, provide the security and low-maintenance solution needed.
- Installation without deployment of software agents or adapters allowed for complete rollout, without unforeseen security issues, in a fraction of the time compared to their previous solution.

Meanwhile, Powers had to dedicate time to writing scripts and other team members were tied up creating their own work-arounds for monitoring and dealing with error messages. "Because [the product] wasn't able to be distributed everywhere, I had written some scripts which ran to do basic monitoring," he explains. "One of the shortcomings of the scripts for doing monitoring was they weren't flexible for the new features coming with MQ. They just monitored some basic things. Not terribly robust, but it worked."

Also, Powers says, "some of the teams had written mini- applications to be able to browse messages in the queue so they could see what was out there."

It was time to find a new solution. One that could monitor all of the company's MQ environments and be used for centralized administration of its growing environment— and with much less maintenance required.

"What we wanted was something that could be maintained with a minimal amount of effort. We didn't want to have to have a full-time employee administering the monitoring product," explains Powers.

The solution they chose is Avada Software's flagship product, Infrared360, a holistic MQ monitoring tool (avadasoftware.com). "The way the Avada product works, we just have a central location where the product is installed, and it uses the MQ facilities for the client channels to communicate to all of our various endpoints, the MQ queue managers. So that means the maintenance is pretty simple.

That Infrared360 is a web management portal for performance monitoring, testing, auditing, reporting, and administration, and is an agentless monitor, were big selling points to the team "Because of our previous experience with the difficulty maintaining agents," says Powers. "We were previously led to believe that agents were easy to maintain. However, they required additional software to do so, and that software had the same drawbacks of being difficult to maintain, or required security configurations that were unacceptable in a production environment."

COMPLEX SECURITY ADDS TO MQ MONITORING REQUIREMENTS

Infrared360 is an out-of-the box product that can be up and running in hours; however, with Alight's security concerns and structured roll-out, implementation took about nine months to complete, from proof-of-concept to implementation in production. Once again, the security audit wasn't approved the first time around and Powers had to go back to Avada for some adjustments.

"We went through a few iterations," he says. "The [Avada] team was very responsive, very cooperative, and understanding. They worked



very hard with us. I wouldn't be surprised if the developers pulled some all-nighters for us in some cases." Because Alight is in the business of human resources, a great amount of sensitive personal information flows between applications and must be secure from outside entities as well as internally. It was essential that only those who needed to see certain information were able to access and see that information.

"Infrared360 was the most secure way for us to be able to monitor everything we wanted."

"Security is one of our key focuses. It's the reason we couldn't get the previous product installed for the first three years we had it; because it didn't pass our security audit," says Powers. "We needed encryption over the network and other security requirements."

Once past the audit process, the installation went quickly and smoothly. The only additional hiccup was recreating some of the custom features in Powers' scripts. "Some of those scripts had some clever things in them for how to monitor certain applications differently than others," he says. "We tried to implement those in Infrared360 and found that there were some regular expressions that could be used to filter certain queues, which was great, but they were too short. The strings that were allowed for them weren't long enough to filter what we wanted.

"Again, the Avada team was very accommodating," he continues. "They made changes in their code a couple of times, and now the string is plenty long and it will never be a problem again. Those scripts might still be in place, but are not a primary method of monitoring anymore. The Avada product does a substantially better job anyway."

Since then, those accommodations have benefited more than just Alight. All the customizations Avada implemented for Alight's security concerns were enhanced and wrapped into all subsequent versions.





VISIBILITY AND SIMPLICITY REPLACES HOME-GROWN SCRIPTS AND COMPLEX MONITORING

Today, the technical operations staff for the various line-of-business units – about 50 users – is able to receive and monitor messages quickly and easily. Before, the homegrown scripts offered the ability to do some self-service activities within the queues, but they were very limited.

“Now they also have the visibility through Infrared360 to see [messages in queues]. And they get a more thorough view of it,” says Powers, who adds that visibility is important for debugging purposes. “When something isn’t working right, they want to see it while it’s still in the queue and understand the issue more quickly, before it gets into their application.”

In addition to the ability to view messages, Infrared360 helps manage intrusion detection for MQ and also allows the technical team at Aight to more easily move messages. “[The technical teams] use that piece as well,” says Timothy Zielke, then CICS/MQ Systems Programmer. “This ability helps them develop better.”

Without the need for customized mini-apps to browse messages, the process for teams to gain access to what they need is also simplified.

“We now have an MQ monitoring tool that can monitor all of our queue managers across all the platforms,” says Powers. “It has also helped analysis of MQ resources across multiple queue managers. [Avada’s] user and group security has also been helpful, as we have been able to give application users the ability to view details of their queues, with the appropriate MQ access in place.”

While there are still challenges that surface with MQ, Infrared360’s analytic capabilities and ease of use have been positive features for Power’s and his team. “Without Infrared360, it’s a much more time-consuming process to move messages during issues,” says Zielke.

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For more information on Avada’s Infrared360 or to arrange a demo [click here](#) or Contact John Ghilino.

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