

Established more than a century ago, this global adhesives leader helps formulate innovative industrial adhesives, sealants, coatings and specialty materials that are used in multiple markets and applications.

### THE BACKGROUND

An industrial adhesive solutions company relies on its IBM i system to support all organizational divisions across the globe. Meanwhile, as IBM provides newer releases of its IBM i OS, many applications running on IBM i servers must be upgraded in order to stay compatible with the OS. IBM announced that it would no longer provide support for the older OS version that the company was running at the end of the third quarter, which at the time, was only nine months away.

### THE CHALLENGES

The adhesives company, which runs software across 10 separate IBM i environments, **required a number of essential application upgrades in order to work with the newer version of IBM i**. This included mission critical applications such as Oracle JDE World, Schneider Electric Avantis™ EAM, Infor PRISM ERP, TrustedLink™ EDI, TL Ashford Barcode400™, and several others. The company's aging equipment posed an additional challenge: an equipment upgrade and data center move was planned soon after the OS upgrade – requiring PSGi to make the application upgrades before IBM support ended and in time for the move.

At the onset of the project, PSGi's primary role was to provide application upgrades and support, while working alongside a traditional managed services provider (MSP) handling the IBM i upgrade. As the project progressed, however, a new challenge arose: **there was an increasingly clear need for integrated managed services support (iMSP)**; for someone to resolve issues between the system upgrades and applications upgrades. This was a job that had not been originally contracted as either third parties' responsibility.

### PSGi's APPROACH

First, to upgrade the company's applications and ensure all software was fully operational, PSGi utilized a comprehensive strategy as follows:

- **Working with the client and the managed services provider, PSGi developed a detailed plan of action** to coordinate activities and address client priorities and project interdependencies for all of the affected applications. The client prioritized the 10 environments. Then, PSGi developed a timeline to create a test environment and perform the upgrades one by one.



- **PSGi performed all planned application upgrades in a test environment.** The test environment running IBM i release 7.1 was created and applications were installed and upgraded as required. As issues arose, they were identified, analyzed and corrected through the coordinated efforts of PSGi, the managed services provider and the client's IT staff. This process ensured everything was running smoothly with the new OS and the enterprise applications. All activities were carefully documented to create a detailed list of tasks required for upgrading the manufacturing environments and taking them live into production.
- **PSGi performed the user testing, too.** Due to time and resource constraints, the client's user community could not be involved in application testing to ensure all functions were operational, meaning PSGi was solely responsible for testing and validation. While not having users test applications prior to go-live is risky and typically not recommended, PSGi was up to the task and testing was successfully completed.
- **Next, PSGi took the upgrade plan to production,** performing the upgrades to each environment on a rolling schedule over the course of several months. Go-lives were always scheduled on weekends to lessen system downtime during manufacturing. Throughout the process, PSGi identified, analyzed and corrected other software issues that arose and incorporated those tasks into the upgrade plan for the next environment. Lessons learned at each successive upgrade allowed PSGi to shorten the upgrade process, in some cases compressing multi-day upgrade processes (at the start of the project) to almost 30 minutes (toward the end of the project)).
- **PSGi worked with the client's IT and user community** around the globe and throughout the entire rollout process. Many of the geographies involved with the upgrades were in different time zones, such as the Asia-Pacific region, so the project required PSGi's experts be available around-the-clock to perform the upgrades and ensure everything was running smoothly and as planned.

Second, in response to rising challenges, **PSGi's role quickly expanded to fill in the middle-ground gaps between managed services support and application upgrades.** These were not issues with the applications themselves; rather, problems that arose from the interdependencies between the OS, the applications, the integration's and security settings.



Leveraging their knowledge as an *iMSP*, or *integrated Managed Services Provider*, PSGi experts stepped in to swiftly resolve those problems, which included:

- Correcting issues related to the security of the systems and how security was working with outside servers
- Troubleshooting communication issues from and to the IBM i which were impacting data warehousing and Business Intelligence solutions
- Reconfiguring the user set-up for double-byte systems (character sets Japanese languages), which were displaying the incorrect language

### THE RESULT

PSGi tackled its client's main objectives plus all unanticipated challenges with enormous success. Putting to use decades of experience with both the IBM i platform and its applications, PSGi consultants upgraded all necessary applications to work with the new OS. Also, borrowing from years of prior experience as an *iMSP*, PSGi was able to expand its role beyond application support – all while maintaining appropriate boundaries and good working relationships with the other consulting company as well as the client.

As a result of PSGi's dedication and tremendous flexibility in supporting go-live problems throughout the project, all bugs were resolved quickly, often within a matter of minutes, no matter the time of day.

All in all, **everything was accomplished on schedule and before IBM dropped support on its OS, under budget, in time for the data center move – and with little interruption to the client's daily operations.** Additionally, by providing the unique “middle-ground” expertise that requires knowledge on the parts of the system between the OS and the applications, PSGi was once again able to strengthen its role as one of the only true integrated Managed Service Providers, for which there is a growing need for in the industry.

*“PSGi overdelivered in more than just application support. The fact that PSGi quickly pivoted to expand its role and become a managed service provider was the key to the project's success. And then, to do it all on time and under budget ... that was nothing short of a miracle.” – According to the Director of IT Services*

