



CASE STUDY

WEB-BASED BACKUP AND RESTORE SOLUTION FOR A GLOBAL DATA PROTECTION LEADER

Plugin support for auto discovery of database instances and creation of policies to backup and restore discovered instances

Client Background

The client is a leading provider of comprehensive data protection solutions to global customers. The client is uniquely equipped to help organizations of all sizes conquer the complexity of managing and protecting their business-critical data. Through their integrated product portfolio, they provide a unified data management experience that delivers unmatched performance and versatility.

The Objective

The client's customers have extensive deployments of PostgreSQL and MySQL which required functionality exceeding what the client provided at the time – a full backup only through script and a config-managed username and password. The client wanted to meet these requirements in the most elegant and efficient way possible.

Xoriant Solution | Key Contributions

Being a core technocrat and having a vast experience in data protection domain, Xoriant was chosen as the technology partner to assist the client in this project.

We helped the client design and implement a web-based backup and restore solution for open-source databases like PostgreSQL and MySQL.

www.xoriant.com

KEY BENEFITS

- **Web-based backup and restore** feature beyond current script-based offering for the upcoming product release to cater to the client's extensive deployments of open-source databases
- **Auto discovery** – Installed database instances could be automatically discovered without user intervention



The solution provided manual as well as scheduled backup of databases of different sizes; this included auto discovery of all instances installed on the client machine to reduce the burden of manually providing the details of databases to be backed up. Our team showed proficiency in understanding the client's inherently complex legacy framework with minimal guidance from the client.

Our key engineering contributions include:

- Providing discovery, backup and restore solutions for multiple platforms such as Windows, Solaris, Linux, and SUSE
- Creating multiple proof of concepts to identify the best solution for auto discovery of installed database instances
- Developing proof of concepts for various backup and restore mechanisms
- Implementing FULL and INCREMENTAL backups and restore points
- Ensuring a facility to backup single and all databases
- Providing various APIs to perform all the operations pertaining to discovery, backup and restore as well as scheduling the same
- Developing role-based access control to perform the backup and restore operations
- Creating policies for scheduling backups
- Ensuring an easy and convenient user interface
- Providing support to backup databases in cluster environment
- Providing end-to-end regression testing and creating automation suites
- Creating documentation and user guide describing the end-to-end flow of various operations

KEY BENEFITS

- Achieved 100% automation of the functionalities developed within the same release
- Achieved a cost advantage due to offshore model of project execution

Technology Stack

C++ | Java | Spring | Spring Boot | JPA | Rest API | JaCoCo | Angular | Perl | Python | Cypress Automation



Xoriant is a product engineering, software development and technology services company, serving technology startups as well as mid-size to large corporations. We offer a flexible blend of onsite, offsite and offshore services from our 17 global offices with over 5500+ software professionals. Xoriant has deep client relationships spanning over 30 years with various clients ranging from startups to Fortune 100 companies.