

Waters Empower™ 3

Multisite Deployment Tips

Whether you're looking to deploy your new or upgraded Waters Empower™ 3 chromatography data system as a local multi-site, multi-region, or global solution, CSols has learned deployment tips that we're passing along to you. These tips will help create an environment with reduced post-deployment challenges, making your laboratory chromatography work easier and more efficient.

Proper Planning

The importance of planning for all of your business needs and user requirements at the beginning of your Empower 3 project cannot be overstated. Plan the work, then work the plan. It all starts with documenting your user requirements, or use cases, depending on the needs of your organization.

- All user requirements or use cases must be properly written and agreed to by all sites. Any issues need to be negotiated and harmonized before deployment activities commence.
- Confirm all instruments are compatible with the feature release of Empower 3 you are installing.
- Confirm the database can be implemented and supported by the organization. If not, provide proper support within the organization or ensure that the vendor can support the database.
- For a regional or global instance, CSols recommends using Lightweight Directory Access Protocol (LDAP) for password harmonization.
- Confirm that all roles at every site can be deployed in the same way, so that privileges and security for each role are appropriate and correct.

Harmonization

The second tip is to consider harmonizing roles, functions, policies, hardware, and software across all sites when installing Empower; do not limit yourself to just "one site fits all," or out-of-the-box vendor recommendations.

- When deploying a regional or global system, it is advantageous to create uniform roles. All sites can then use these same roles to run analyses, review and approve data, and administer this system.
- Optimize/harmonize wherever possible between all participating sites on the business rules for a single new instance.
- Functions and policies should be optimized so they can be set up and performed in the same way by all locations.
- Upgrade to the latest hardware (physical or virtual) and the latest operating system (Server 2016 and Windows 10).
- Consider uniformly routing and approving chromatograms across the organization.
- Consider updating laboratory processes so they incorporate new functionality supported by Empower 3 rather than creating unnecessary configurations to meet current processes.

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Communication Plan

The next tip is to over communicate changes to the users and approvers, as communication is an important part of change management. This is even more important when deploying across multiple sites (and possibly countries) as not everyone can be in every meeting. This is best done via a written plan executed by the project team. It should include how the users will obtain information about your Empower 3 implementation and at what frequency. The information can include key project contacts, milestones with dates, project status, the go-live date, and new features that will improve the end user experience.

- All users need to be kept informed about what is being deployed down the road. Some will embrace change while others will resist it; but a well-written and imparted communication plan will allow users to feel connected to the deployment. It can be used to create advocates for implementing at other locations.
- Communication can be written (e.g., email, company-wide intranet post, etc.) or verbal (town hall meetings, team meetings, lunch and learns, etc.).
- For multi-time zone deployments, it's important to provide video communication at various times throughout the day, and/or provide recordings in a centralized place.
- Communication of expectations from approvers on project documentation, specifically around routing and turnaround times, is also key. There must be agreement on the time it takes to review and approve documents or the plan might be compromised.

Confirm Location & Setup of Database

The database is a key component of Empower 3. For a multi-site deployment, having the database set up correctly in centralized location is crucial to proper function of the system. A database that is too far from one or more sites can introduce latency in data transfer. And, because the system can be set up two distinct ways, it is important to follow the installation manual. The database can be housed either in an independent box or in a shared box with the application server. If your installation requires them to be separate, it is important to note that the database and application server must at least be on the same subnet. In addition, the following must also be performed as part of setup.

- Verify all settings in the database to ensure the system functions as intended.
- Verify that latency is not an issue from site to site.
- Verify that any port checking or antivirus software is configured properly or eliminated, as required by Waters.

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Backup & Restoration of Legacy Data

The last tip applies to Empower 3 upgrade projects. Allow plenty of time for the backup and restoration of legacy data. Performing a backup or restore of Empower data includes monitoring the application server and the database server. Empower employs a checksum on both the backup and restore of each project. If the tree structure is complex with many projects or if individual projects become very large, this process takes a lot of time. The backup and restore process should be run from the server or from a client box like a LAC/e but never from CITRIX. To accomplish this in a timely fashion, you must do the following:

- Archive as much as possible outside the upgrade project.
- Allocate days (not hours) for the backup and restore; the actual length of time depends on the amount of data and how the tree structure for the projects is configured.
- Verify the restored data upon completion.
- Spot check and confirm that some files from the legacy data open properly.

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