

PROACT



Data migration

The most help when you need
help the most

Let our experts help you protect your most important asset

Data is one of your most important assets and so it follows that its migration is one of the most critical phases of any IT project.

Thanks to our experience migrating all types of data between different infrastructures (we've been helping organisations across Europe for over 24 years), we've developed a standardised, step-by-step approach that minimises risk and makes the process as smooth as possible.

Because of the success we've had in what is such a important part of any project, we regard our data migration methodology as one of the key reasons our customers choose us over our competitors.

We're experienced in a wide range of tools that help us, including:

- Hypervisor capabilities (e.g. VMware Storage vMotion, Hyper-V Storage Live Migration)
- Storage array capabilities (e.g. array functions for replication, cloning, importing LUNs etc.)
- Host-based tools (e.g. Robocopy)
- Backup/Restore

However, there's more to successful data migration than being able to use tools to copy data from one place to another. It's about understanding you, your environment and your needs. It's about planning. And it's about working carefully through the following stages.

Workshop

The first step in a project's data migration phase is the Migration Planning Workshop. Its aims? To build a common understanding of the environment, requirements, dependencies and constraints amongst the key people involved in the migration project – and to gather the information needed for the next step – the detail planning.

The number of people needed at the workshop and the amount of time it takes depend on the size and complexity of the environment. For the simplest cases, a technical specialist from the customer and a Proact consultant can complete the workshop in less than half a day. For the largest, most complex environments, several specialists from the customer and Proact will need to be involved, and the workshop may require more than one day. Here's what a typical workshop agenda looks like:

- a. Introductions and workshop objectives
- b. Overview of environment
 - i. Key business objectives
 - ii. Key business services
 - iii. Key infrastructure components (old and new)
 - iv. Service mapping on to infrastructure components
 - v. Service dependencies
- c. Gather requirements
 - i. What data needs to be migrated? (Service-centric view)
 - ii. When?
 - iii. Constraints (e.g. business change freezes, permissible service outages)
 - iv. Performance expectations (need to benchmark before and after?)
 - v. Testing (e.g. requirement for 'dry runs', network 'bubbles', jump servers etc. for testing)
 - vi. Backup and DR requirements
- d. Understand dependencies
 - i. Within this project
 - ii. With other projects
- e. Understand how migration links with change control
 - i. Change freeze for services around migration window to reduce risk
 - ii. Decision criteria for new services; deploy on old and migrate, or deploy on new
- f. Understand key stakeholders
 - i. Business units
 - ii. IT management
 - iii. IT operations
 - iv. End users
 - v. Business reporting requirements
- g. Outline plan
 - i. High level view of which services will be migrated when
- h. Assign tasks and responsibilities
 - i. Review workshop objectives and agreed actions

Detailed planning

We take a service-centric approach to reduce risk

After the kick-off workshop comes the development of detailed migration plans for the various business services that are in scope. We use a service-centric approach to reduce risks, simplify planning and minimise any potential negative effects during the migrations.

It's our consultants who typically draw up the migration plans, working closely with relevant customer staff, but if the customer has staff with the necessary skills and time to work on the plans, then they can do that. A detailed migration plan will cover the following topics:

- a. What's involved
 - i. Services
 - ii. Data
 - iii. Networking
 - iv. Change control interface
 - v. Operations interface
- b. Migration approach
 - i. Online or offline
 - ii. Migration tools
 - iii. How to ensure data consistency
 - iv. How to ensure data currency
 - v. How to ensure performance
 - vi. Benchmarking before & after migration
 - vii. Dry runs?
 - viii. Go/No-go decision criteria
 - ix. Business communications
 - x. Technical team communications (e.g. conference bridge, on-line chat) during migration
 - xi. Pre-requisites and dependencies
 - xii. Estimated timings
 - xiii. Back out plan



Walkthroughs

To share understanding of how the migration will proceed

Once we have produced and reviewed the migration plans with our customer, it's useful to walk through the plans with the people who will be involved in executing the plan. This ensures that all of the relevant people have a shared understanding of how the migration is expected to proceed. It can also highlight issues with the plan early on when it is relatively straightforward to resolve them. So, whilst optional, we highly recommend the walkthroughs for complex migration scenarios. A typical agenda is as follows:

- a. Walk through migration plan with relevant people so everyone has a clear idea of
 - i. What they need to do
 - ii. What pre-requisites need to be in place before they start
 - iii. Who is depending on their output
 - iv. How activities will be coordinated (communication plan)
 - v. What go/no-go control gates are in the plan
 - vi. Who makes the go/no-go decisions and what criteria do they use
 - vii. The back out plan
- b. Refine timing estimates
- c. Confirm ownership of individual tasks



Execution

Time to put the plans into practice

With all the migration plans in place, the actual migrations can start. There are usually some tasks, such as business communications, pre-requisite checks and imposing a change freeze on the affected service, that take place in advance of the actual migration itself.

For critical systems, there may be one or more 'test runs' to prove the migration methodology is sound and the post-migration configuration meets business requirements, so the migration plan is executed more than once, with only the final 'cutover to live' step being omitted on the test runs. A typical sequence of events is as follows:

- a. Pre-migration phase
 - i. Pre-migration business communications
 - ii. Pre-requisite checks
 - iii. Performance benchmarks
 - iv. Change freeze
- b. Start of migration window
 - i. Confirm 'good to go'
 - ii. Business communications
 - iii. Execute migration plan
 - iv. Log all communications and timings
 - v. Log all go/no-go decisions as we make them
 - vi. Final go/no-go
- c. Post-migration business communications
- d. On-going tasks (e.g. performance monitoring)



Review

Can we make outstanding migrations even more outstanding?

It is important to learn from service migrations that have been completed and feed any recommendations forward into plans we've yet to execute. This post-migration review provides the framework to for those who executed the plan to assess what went well and what we could improve. A typical agenda is as follows:

- a. Review migration with key stakeholders
 - i. What went well
 - ii. What needs to be improved
 - iii. Accuracy of timing estimates
- b. Feed forward to outstanding migration plans



Close

How did we do?

Once we've completed all the service migrations, we'll schedule a final review and project close meeting. This will ensure that we've completed all the migration activities satisfactorily and have identified any lessons we've learned that can be used to improve future migrations.



Project management

Our project management team helps ensure that migrations run smoothly and that we identify and resolve any potential issues in a timely manner. It's comprised of skilled Project Managers that we can deploy to guide and manage migration projects of any size.

Resourcing

Service migrations, when done properly, can be resource-intensive. We have a flexible approach to resourcing that sees our people and customer staff working together in the most effective way to deliver the desired outcomes.

One of our common strategies is to let Proact consultants lead the first migrations and train customer staff as they do, so that our involvement tapers off as customer staff gain the necessary skills and experience to execute the migration plans themselves.

Information is at the heart of your business. Protecting it is at the heart of ours.

Proact is Europe's leading independent data centre and cloud services provider. Proact supplies business benefits by helping companies and authorities to reduce risk and costs, and above all to supply them with flexible, accessible and secure IT services. Proact's cloud service operations manage 70 petabytes of information. Proact has completed more than 3,500 successful projects all over the world to date.

The Proact Group has more than 720 employees and operates in 15 countries in Europe and in the USA. Proact was founded in 1994, and its parent company Proact IT Group AB (publ) has been listed on Nasdaq Stockholm under the symbol PACT since 1999.

For more information about Proact's activities please visit us at www.proact.eu



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