

# migrating

Lotus Notes to Microsoft  
analyze, prepare, execute



# Mastering the complexity of Lotus Notes migrations to the Microsoft platform

Atos' efforts are focused on building a positive ROI of your migration to the Microsoft platform. Major IT migrations can be complex, long-running and expensive projects that may have a risk of data loss or downtime. In order to prevent negative impacts on the business and users, migrations must be planned carefully, and processed accurately, against time and budget commitments.

**As you seek to move from Lotus Notes / Domino to Microsoft Exchange and SharePoint, Atos can help and support you at every stage. We will work with you to select the solution and platform that best meets your business requirements: Exchange and SharePoint services out of the cloud, on-premises or hybrid solutions.**

## The Atos approach to Microsoft migration

Our Migration Services approach begins with planning and preparation. Here, we define requirements and the derived business case in close cooperation with our clients.

Once approved, Atos provides experienced Lotus and Microsoft architects to design the solution and to manage the migration project.

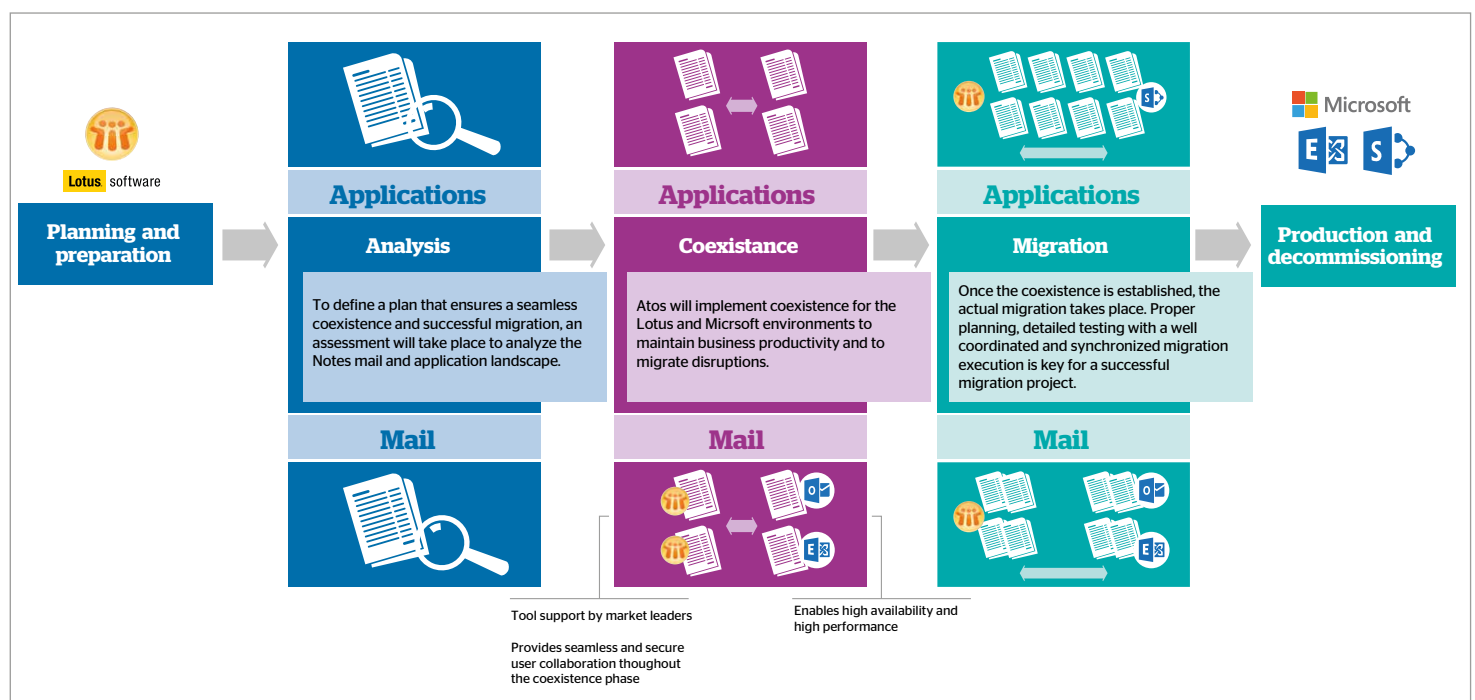
In order to ensure a seamless coexistence and successful migration, an assessment will take place to analyze the Notes mail and application landscape. Atos will implement coexisting systems for the Lotus and Microsoft environments to maintain business productivity and mitigate disruptions. Once coexistence is established, the actual migration takes place.

Proper planning and detailed testing with a well-coordinated synchronized migration execution is key for success. Atos' proven migration methodology manages the complete migration lifecycle - from planning to production - using market-leading tools combined with the Atos 'Global Delivery Platform' methodology.

Atos provides templates and guidelines for every migration step, which will be tailored to your requirements.

Atos' proven Management of Change process supports the optimal adoption of the new platform by the end users. This incorporates training of the current Lotus Notes users and IT staff to ensure the proper transition of essential knowledge.

Once the migration is complete, Atos can manage the Exchange and SharePoint production platform as well as the consolidation and decommissioning of the Lotus environment. In Figure 1, we share our view of migration best practice.



**Figure 1: Migration best practice - overview**

There are two key elements to the migration from Lotus Notes / Domino to Microsoft - Messaging Migration and Application Migration.

## Assessment and analysis

Before migrating Notes applications to SharePoint it is imperative to perform a careful analysis of the current application environment. This assessment considers (and potentially builds on) results from client pre-assessments.

The assessment contains automated, as well as expert, analysis. The automated (tool-based) analysis will show:

- ▶ **Domino user mail data size**
- ▶ **Domino user mail data archive size**
- ▶ **Amount of Domino mail archives per user**
- ▶ **ACL delegation**
- ▶ **Encrypted email count**
- ▶ **Local user archive size and location**
- ▶ **Identification of the user's perspective local archive location**
- ▶ **The actual relevance of databases for migration (e.g. databases to operate the Lotus Domino / Notes platform, test and training databases)**
- ▶ **Redundant implementation of business processes**
- ▶ **Complexity of applications.**

In case of complex Notes applications, a tool-based analysis will not be sufficient. In these instances, Atos will examine the area in detail and in close cooperation with the client. Atos Functional Architects will analyze the more complex Lotus Notes applications. The specific migration plan per application will be determined after a full assessment and a design phase is completed.

The main deliverable of the assessment phase will be a report with the following content:

- ▶ **Catalog of servers**
- ▶ **Server detail and statistics**
- ▶ **Identification of server type (application, mail, both)**
- ▶ **Master list of applications covering the details of functionality of all Notes applications identified.**

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# Messaging migration

A key element of any successful migration is to transition every aspect of messaging services successfully. This process can be broken down into two key phases: project phase and execution phase.

## Project execution

### Migration methodology

During migration, we follow the Atos standard phased migration approach; this includes the possibility to build in client-specific requirements.

Key questions about these requirements must be asked and answered during this part of the project. For example, which Notes messaging environments (regions, servers) need to be migrated? How many applications or systems are mail-enabled and what mitigation strategies can be applied to avoid business process disturbances for those applications?

### Migration approach

Your Atos project team will be made up of members with complementary skills and experience in similar projects, to capitalize on expertise and methodology. As a client, you will benefit from Atos' best practice gained through lessons learned on similar projects.

We find that smaller companies sometimes choose to migrate all mailboxes together as a single wave, to avoid having to support coexistence between the Domino and Exchange directories through the transition period. On the other hand, most medium and large companies will need to provide a certain degree of systems coexistence. Users should be able to send mail and schedule meetings with one another without having to know the migration status of other users.

Atos makes a prior audit manual in the state-of-the-art of the Domino environment. The transformation of a messaging system from Lotus to Exchange presupposes to study the coexistence between different messaging systems.

The migration goal is to transform all Lotus mailboxes to the new Microsoft Exchange Server messaging infrastructure. This includes all existing email addresses, which consist of:

- ▶ **Email**
- ▶ **Calendar**
- ▶ **Contacts.**

The data migration approach for personal archives will be defined by the client's requirements.

Of course, encrypted data cannot be migrated owing to technical constraints. Therefore, users have to decrypt their mails before they can be migrated. The Atos best practice approach will guide users during this process.

## Phases



## Main activities

Concept	Assessment	Definition / solution design	Customize	Pilot	Bulk	Handover
<b>Feasibility</b>  <b>ROI</b>  <b>Migration strategy</b>	<ul style="list-style-type: none"> <li>▶ Assess environment</li> <li>▶ Assess mail enabled applications</li> <li>▶ Assess network connectivity / bandwidth between Lotus Notes and target Microsoft Exchange environment</li> <li>▶ Assess user population (users per site) and connectivity / bandwidth</li> <li>▶ Assess system dependencies e.g. ERP, mail enabled systems, automatic mails - monitoring, email FAX / scan facilities etc</li> <li>▶ Discover mobile devices.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Migration concept and guidelines</li> <li>▶ Test guide for mailbox migration</li> <li>▶ User acceptance test plan</li> <li>▶ Training recommendations.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Installation of migration tools</li> <li>▶ Configure source environment</li> <li>▶ Set up coexistence / target environment</li> <li>▶ Unit test migration planning.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Migration of selected test accounts (mailboxes and calendar)</li> <li>▶ Perform user acceptance test (UAT)</li> <li>▶ Test of fall back mechanism</li> <li>▶ Test migration of a small number of users.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Industrial migration</li> <li>▶ User support</li> <li>▶ Training</li> <li>▶ Re-route mails to new mail server</li> <li>▶ Re configure mobile devices.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Update operational documentation</li> <li>▶ Coordination with Parties involved</li> <li>▶ Decommissioning Systems.</li> </ul> <b>Project closedown</b>

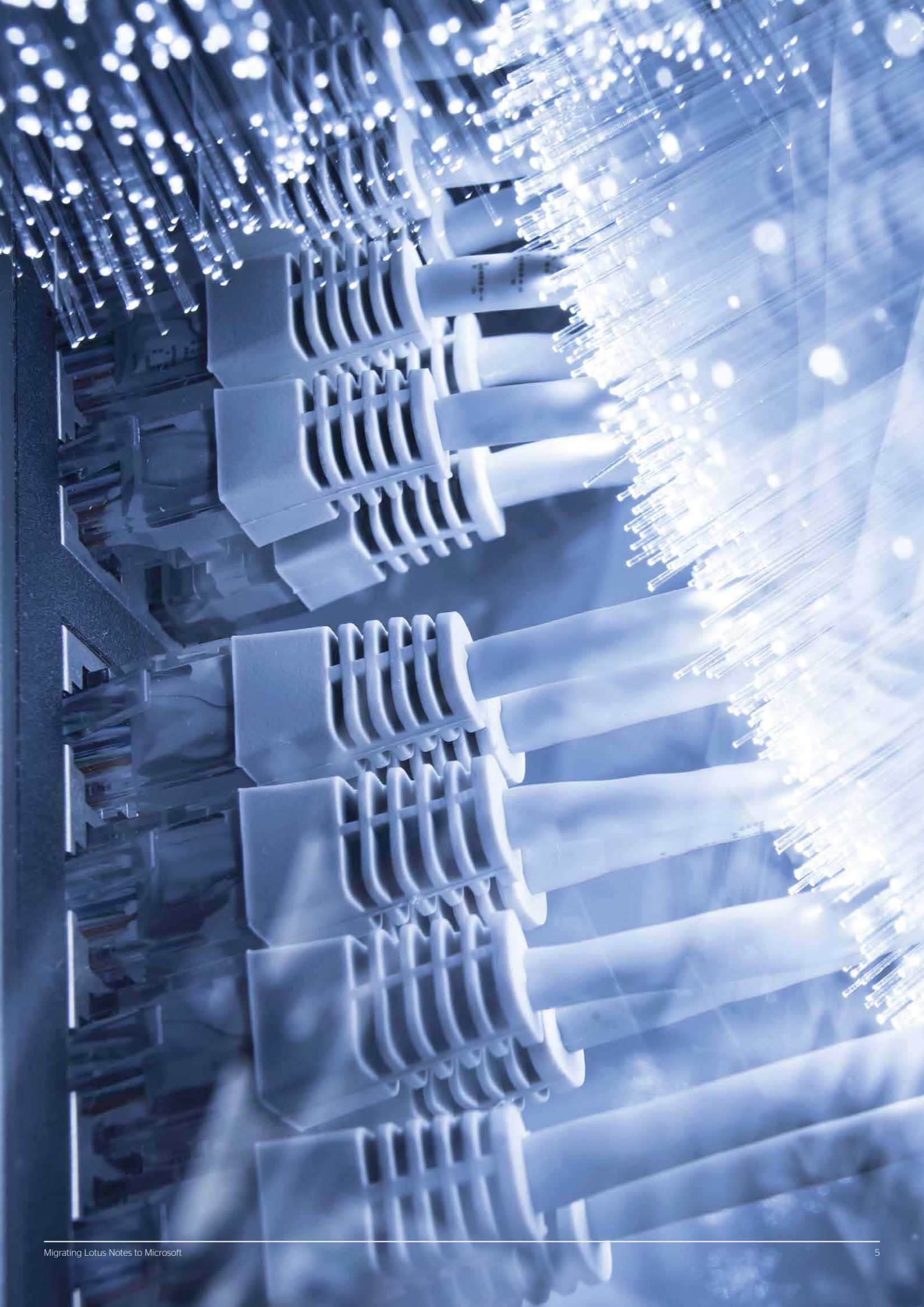
## Core results

<b>Documents</b> <ul style="list-style-type: none"> <li>▶ Related documents.</li> </ul>	<b>Assessment report</b> <ul style="list-style-type: none"> <li>▶ Mail inventory list</li> <li>▶ Statistical information</li> <li>▶ Usage information</li> <li>▶ List of systems that route mail, remediation plan</li> <li>▶ Mobile devices migration plan.</li> </ul>	<b>Solution design</b> <ul style="list-style-type: none"> <li>▶ Migration concept</li> <li>▶ Finished solution / target platform design.</li> </ul> <b>Project definition</b> <ul style="list-style-type: none"> <li>▶ Scope defined</li> <li>▶ Adjusted project effort</li> <li>▶ Agreed project guidelines &amp; process.</li> </ul>	<b>Customization</b> <ul style="list-style-type: none"> <li>▶ Implemented Coexistence / target environment</li> <li>▶ Test plans</li> <li>▶ Acceptance criteria defined.</li> </ul>	<b>Pilot results</b> <ul style="list-style-type: none"> <li>▶ UAT* accepted</li> <li>▶ Pilot approved.</li> </ul>	<b>Migration</b> <ul style="list-style-type: none"> <li>▶ Migration wave validated and approved.</li> </ul>	<b>Production</b> <ul style="list-style-type: none"> <li>▶ Operations manual</li> <li>▶ List of systems to be decommissioned</li> <li>▶ Migration wave completed and mail service productive.</li> </ul>
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Figure 2: Mail migration phases

\*UAT (user acceptance test)





# Application migration

The next element of successful transition from Lotus Notes / Domino to Microsoft is to migrate all key applications from one environment to the other. As with Messaging Migration, this falls into two phases: project phase and execution phase.

## Project execution

### Migration methodology

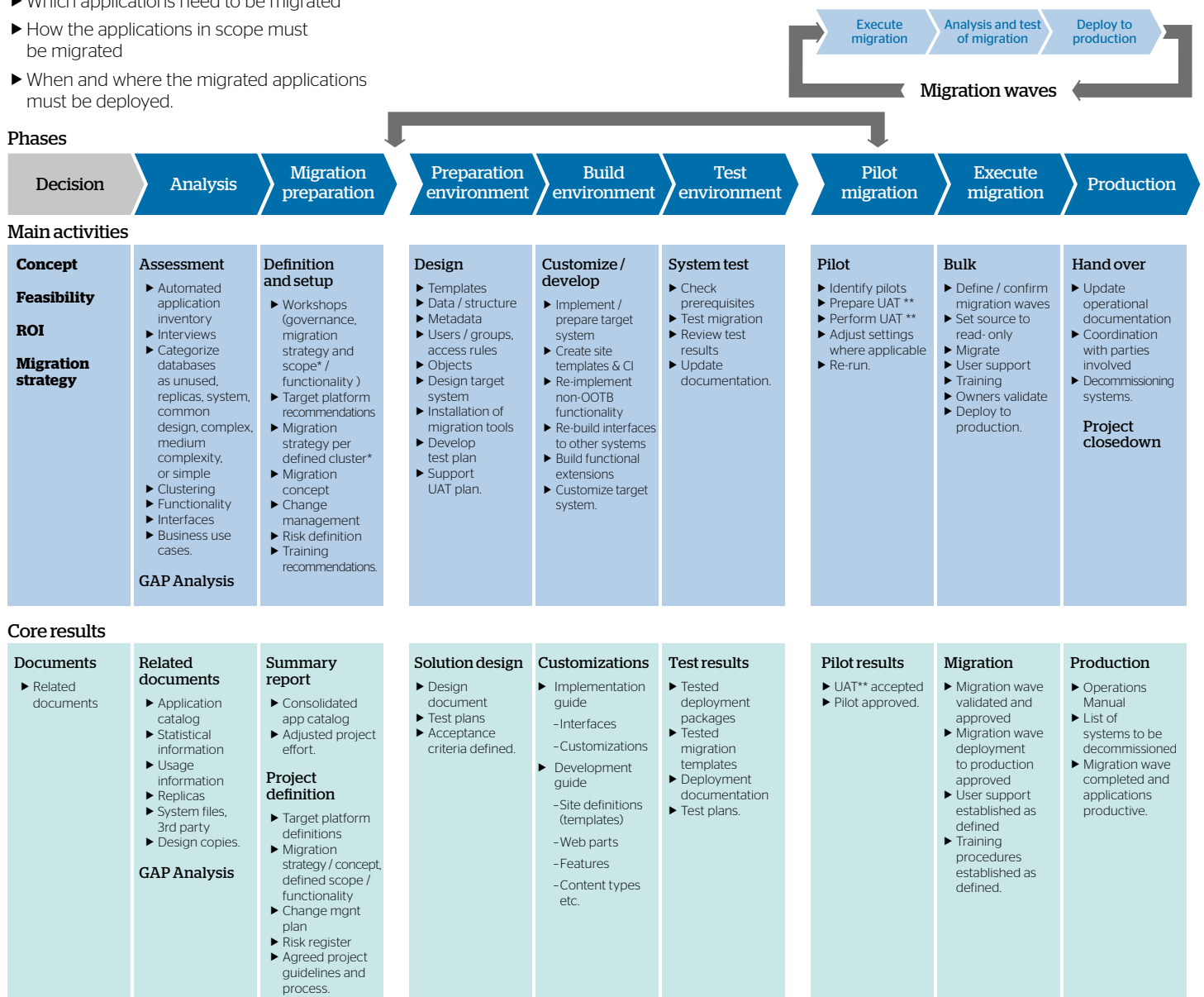
Here, we summarize the migration methodology comprising the Atos standard phase approach for migration considering client specifics. The migration methodology focuses on the challenges:

- ▶ Which applications need to be migrated
- ▶ How the applications in scope must be migrated
- ▶ When and where the migrated applications must be deployed.

Figure 3 provides an overview of the migration phases, the related activities and the core results of the activities.

Most application migration projects will follow the below phase approach. Atos will follow an iterative approach (design, execution) due to the execution of the migration in waves also concerning agile principles.

Client requirements indicate some adaptations to the phase approach below, especially for analysis, migration preparation and prepare environment. These have been highlighted in the following sections.



\*includes security class definition

\*\*UAT (User acceptance test)

Figure 3: Application migration phases

Security Class	Level of protection	Tagging requirements	Group of persons with access	Damage in the event of abuse	Possible deployment platform
Public	None	None	Public	N/A	Public cloud / private cloud - candidate
Internal	Protection against external access	None	Staff and business partners	Impact on business process	Private cloud - candidate
Confidential	High level of protection required	To be tagged as 'Confidential'	Limited group of persons	Impact on the business of the client group	
Secret	Maximum level of protection required	To be tagged as 'Secret'	Personally selected group of persons	Economic harm and / or damage to the image of the client group	Client internal / private cloud - candidate

**Table 1: The possible security levels and the proposed distribution of related applications to platforms.**

## Distribution of applications

Atos assigns every application a Security Class definition (often provided by the client) to serve as a basis for effective and secure application distribution. Each application will be assigned to a deployment platform during migration preparation phase, as this might influence the application design.

## Design approach

Application migration consists of three areas presented in Figure 4 on page 8: Migrations / Re-Developments. Both migration procedure and tools are selected according to the complexity of applications. Complex applications require detailed analysis, and potentially may require a proof of concept or pilot.

Data, standard and simple to moderate applications are usually candidates for tool-supported migrations. But even complex applications can benefit from such tools when it comes to data structures, input forms and application-related data that must be migrated.

A good example of a tool used by Atos is the 'Notes Migrator for SharePoint from Quest' that supports migration tasks. Since the current applications might be not well documented, Atos develops documentation of the current processes so they can be migrated to SharePoint. This requires the assistance of client resources to explain the workflow and business processes behind application.

Each application will go through an assessment process to determine the data mapping to SharePoint and the specific process that will be followed for the migration.

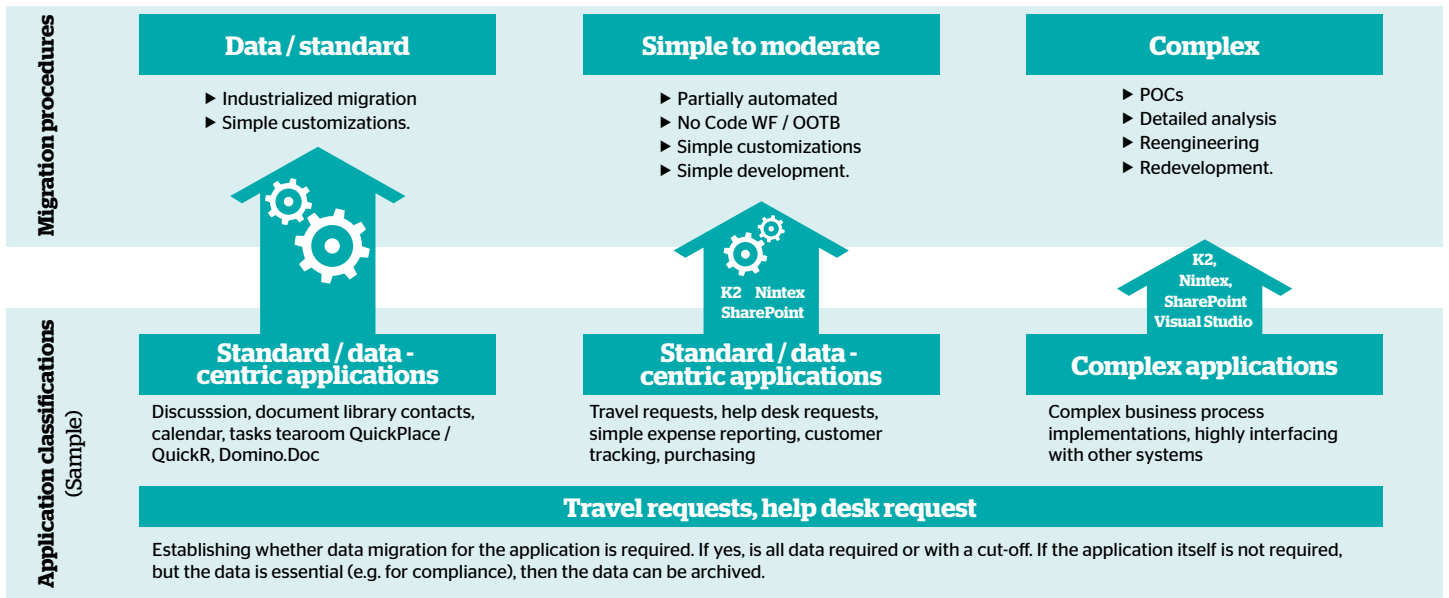
After the current applications are clearly understood, Atos may use the Quest Notes Migrator for SharePoint to assist in the migration of Notes and Domino applications to SharePoint. The tool will reduce the time and effort required to perform the migrations. However, no tool can do all of the work. A portion of the work will need to be done with custom scripts and some level of coding.

Applications will be migrated first to test instances of the applications. Those test instances will then undergo functional and end-user acceptance testing.

Once the testing is completed, the actual data will be fully migrated and users will switch over to the new applications. As applications are migrated to SharePoint, user interface (UI) elements will change. This may require end user training on the new UI.

For content migration not all stages are required; content that is part of an approved schedule (wave) might be migrated directly into the productive environment. In cases in which this is not allowed by clients' regulations or processes, the content is deployed into the staging environment first and after approval it will be deployed to production.





**Figure 4: Migrations / redevelopments**

### Critical migration paths

The method to identify the critical path for migration is mainly based on an application rating. Applications are rated from 1 to 10, depending on their criticality.

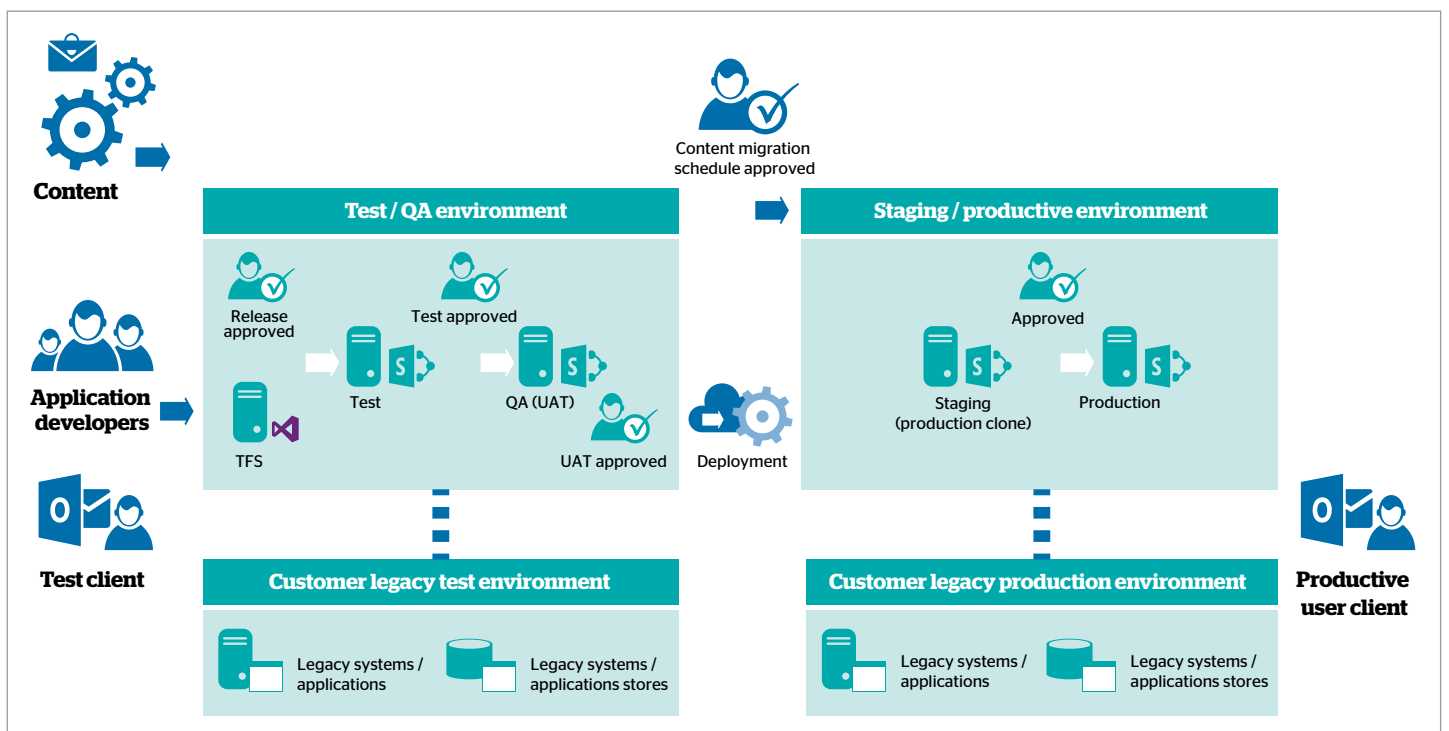
### Core Systems / Services

Identify databases that are used by multiple departments and / or locations and assign a high rating to the databases that are used by more departments / locations. This will help identify constraints like network and firewall restrictions that need to be taken care of early in the migration cycle. This will also start exposing SharePoint to a larger cross-section of client employees and help in identifying training and orientation needs up front.

### Applications communicating with other Notes applications or with external systems

Assign high ratings to applications that communicate with other Notes applications and discrete applications that have critical communication with external systems. This ensures that duplicate communicating process migrations can be avoided. The migration of the first few applications containing high amounts of communications will ease the way for following migrations, as the communications will contain similarities.

Once the ratings are assigned, a set of databases with the highest scores is recommended to that client for migration. A client may add / modify applications in this list based on other factors. Once the shortlisted applications are migrated, this exercise is repeated to identify more candidates for migration.



**Figure 5: Migration environments sample**





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# Application migration best practice

Over the last 25 years, Atos has built a strong background and established best practices out of various migrations expanding over multiple sources (Lotus Notes, Livelink, Teamware, and others) across all industries. What all those migrations have in common is that no tool can design or specify the functional migration of an existing legacy application.

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In order to have a transparent overview of applications that might become members of the migration, all assessed applications reside in an application inventory repository (e.g. a SharePoint list). This repository is composed of the application dependent information (name, template, notes database, etc.) and enriched by the migration process related information (business owner of the application, is in scope of the migration, planned migration date, external interfaces, is dependent on other migrations, etc.).

The business owner of each application is responsible for all decisions regarding the application (e.g. retire, archive, delete or the applications' functional migration decisions).

There are some decisions on general design and Lotus to SharePoint mapping that will be agreed at the beginning of the project's preparation phases. Those decisions will become the design guidelines for all applications in scope of the migration. Nevertheless, client business process owners per application or application template will, in collaboration with Atos, have to identify the best SharePoint schemas, functionalities and features to be used to implement the functional migration on SharePoint.

The overarching goal should be to:

- ▶ **Leverage out-of-box features whenever possible, to simplify future SharePoint upgrades**
- ▶ **Identify what functionality is really needed instead of functional cloning**
- ▶ **Archive content versus rebuilding applications**
- ▶ **Buy-versus-build.**

To accomplish these goals Atos has established a migration team structure that incorporates highly experienced Lotus Notes architects and developers, and SharePoint architects and developers. This kind of team mixture leads to the best migration results, because only Lotus Notes developers know exactly what behavior is expected, while SharePoint experts have the best knowledge of how to efficiently implement it on SharePoint.

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# Go-live and decommissioning

Once all the above is completed, migrated mailboxes and migrated applications will be handed over to production. The related operational documentation will be updated and the migrated messaging and application environment will be moved into operation.

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During handover to production it's extremely important to keep all parties informed of progress. As well as this, the handover must be aligned with the decommissioning of the related legacy systems.

Atos is well-placed to support the decommissioning of a client's legacy Lotus servers; while this is within the client's responsibility, it is complex activity that has to be scheduled with the Lotus operating service provider and would require your decision.

Atos can support this activity with our experienced professionals, particularly in regards of the timing for the start of migrated applications on the new platform and the respective decommissioning on the old platform, which must be aligned.

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## Why Atos

Atos has a deep knowledge of messaging, collaboration, business process development solutions and implementations, and specializes in Lotus Notes and Microsoft technology. We have performed many migrations of Notes and Domino environments, using a mature process that leverages third-party tools, custom scripts and tool-based as well as manually driven information collection processes. Atos has assessed over 100,000 Lotus Notes databases, globally, across every market sector.

Atos has extensive experience in developing SharePoint based business applications and platforms and provides one of the world's largest SharePoint environments to Siemens. We can also include integration with other systems of the client's IT landscape such as SAP.

Atos can provide migration delivery resources on all continents and offer optimized pricing through a migration factory approach supported by 100% Atos-owned Global Offshore Delivery Centers.

Atos has a deep knowledge of both worlds; for a number of years Atos has operated large Lotus Notes environments which help to understand our clients' expectations on the new target platform.

### Atos at a glance

- ▶ **More than 5,400 MCP qualifications globally**
- ▶ **Help to build the business case based on the clients' requirements**
- ▶ **Atos Global Delivery Platform (GDP) methodology with standardized methods and tools**
- ▶ **Atos proven management of change process for optimal adoption of the new platform by the end users**
- ▶ **Training of Lotus Notes users and IT staff to ensure the proper transition of the essential knowledge**
- ▶ **Strong Global Transformation and Delivery Network**
- ▶ **Focused on driving 'Consolidation and Harmonization' through continuous transformation.**

### Messaging

- ▶ **Atos supports mid-market and enterprise clients globally with a volume of more than 2.5 million mailboxes and more than 400,000 mobile devices**
- ▶ **We deliver migration and upgrade services from Lotus Notes, Novell GroupWise, Exchange 2003, 2007 and 2010 to the latest Microsoft messaging environment.**

### Application / collaboration

- ▶ **Having delivered SharePoint solutions for more than eight years, Atos is one of the most experienced IT companies in this area. Today we are hosting over 100,000 site collections with more than 100 TB of data worldwide within six large-scale data centers and 36 small sites. For our client Siemens, we operate one of the largest SharePoint environments worldwide with nearly 400,000 users.**

All of our Lotus Notes migration clients will benefit from our wide-ranging experiences of making the move from to Microsoft seamless, rapid and efficient for organizations in every field of business.

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**Microsoft**  
**GOLD CERTIFIED**  
Partner



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# About Atos

Atos SE (Societas Europaea) is an international information technology services company with annual 2012 revenue of EUR 8.8 billion and 76,400 employees in 47 countries. Serving a global client base, it delivers Hi-Tech Transactional Services, Consulting & Technology Services, Systems Integration and Managed Services. With its deep technology expertise and industry knowledge, it works with clients across the following market sectors: Manufacturing, Retail & Services; Public sector, Healthcare & Transports; Financial Services; Telecoms, Media & Technology; Energy & Utilities.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. It is the Worldwide Information Technology Partner for the Olympic and Paralympic Games and is quoted on the NYSE Euronext Paris market. Atos operates under the brands Atos, Atos Consulting & Technology Services, Atos Worldline and Atos Worldgrid.

For more information, visit: [atos.net](http://atos.net)

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