

# Fujitsu Legacy Modernization

## Conversion of Microsoft Access to Microsoft SQL Server



# Fujitsu Legacy Modernization Offering for Conversion of Microsoft Access to Microsoft SQL Server

Fujitsu and our Legacy Modernization partner ConvertU2 Technologies bring to the market a highly efficient service to migrate your Microsoft Access databases quickly, reliably and with minimal risk, to Microsoft SQL Server.

Fujitsu's Global Legacy Modernization Offering is based on a standard set of eight modernization capabilities which are available to our clients throughout the world.

There are often a significant number of Microsoft Access databases in all levels of an enterprise, many of which have become mission critical. It is important that these databases are protected from data loss, corruption, and poor performance. At the moment this is almost certainly not the case.

To achieve a satisfactory level of service, IT Departments acknowledge the importance of hosting these applications centrally on a robust server platform such as Microsoft SQL Server 2005/2008.

The Fujitsu Legacy Modernization service utilising the 2SQL migration toolkit automates the Microsoft Access to Microsoft SQL Server conversion process achieving an 80%-90% automated conversion rate. The remaining conversion work is completed by Fujitsu Legacy Modernization resources manually to achieve the desired outcome. This service has been proven to shorten migration project timelines by more than 80%.

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## Issues / Risks

- Management and maintenance nightmare, Microsoft Access databases are typically copied and shared between peers leading to many versions
  - Security - Microsoft Access relies on file based security. Access to the file allows unrestricted access to data
  - Networked Access databases are inefficient with network bandwidth
  - Microsoft Access unable to realistically support more than 5-10 concurrent users
  - The maximum theoretical size for a Microsoft Access database is 2 Gigabytes but in practice much lower
  - No reliable mechanisms exist for performing backups of a Microsoft Access database file unless all users are disconnected
  - IT management drive to centralise applications and data
  - Until now no easy upgrade path between Microsoft Access and SQL Server
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**Fujitsu's Global Legacy Modernization**  
Offering teams also have skills and knowledge in country and regional capabilities. Please see the local Websites for more specific information.

**Fujitsu's Global Legacy Modernization**  
Offering is run from seventeen teams which are situated in seven regions around the world. The offer can be accessed from any country in which Fujitsu has a local presence.

The key reasons to upgrade from Microsoft Access to Microsoft SQL Server include enhanced:

- Reliability
- Scalability
- Security
- Performance
- Maintainability
- Manageability

Microsoft Access is a fantastic tool for solving immediate business needs or where the business needs did not justify professional development by the IT Department; therefore most Microsoft Access databases are created by beginners or power users who do not have the experience or knowledge to create professional applications. These applications are built over time, and new features and data models are added as needed with little thought for performance or scalability. The result is that many solutions don't reliably support more than a few concurrent users and place a great burden on network infrastructures. The evolution of these databases into important business applications justifies additional investment to migrate them to Microsoft SQL Server.

It is important to recognize that not all Access databases need to be migrated; the majority of Microsoft Access databases are not identified as candidates for migration because they do not require attributes such as scalability, security, and reliability. However, those that do are prime candidates for migration to Microsoft SQL Server 2005/2008.

There are 3 options for Microsoft Access databases identified as candidates for upgrade:

- **Do nothing** – A business decision may be taken to accept the risks and continue as normal.
- **Rewrite** – Re-architect and rewrite the application, requiring extensive investment and effort.
- **Migrate** – Convert the database to Microsoft SQL Server to gain significant benefits with much less effort than a rewrite.

Do nothing is a valid option. However, many of the issues experienced with Microsoft Access will become increasingly acute over time, eventually making the database impossible or impractical to run.

Rewriting the system is a high-risk, expensive and time-consuming undertaking.

Migration is a low risk option giving excellent cost/benefit returns.

# Microsoft's Conversion Tool Suite

The upgrade path and conversion tools available from Microsoft only partially complete the conversion from Microsoft Access to Microsoft SQL Server - estimates vary with the complexity of the database, but the degree of success is likely to be in the range of 5% to 40% automated conversion rate for a project. By comparison, the Fujitsu Legacy Modernization service utilising the 2SQL migration toolkit automates the Microsoft Access to Microsoft SQL Server conversion process with 80%-90% automated conversion rate for a project leaving significantly less manual effort.

Microsoft Access databases converted to Microsoft SQL Server using the 2SQL toolkit achieve enhanced performance by maximising server-side processing and minimising client-side processing, a capability that is very important when converting complex databases.



# Approach and Benefits

Fujitsu's Global Legacy Modernization Offering has three Centres of Excellence; these are based in America, Europe/UK and Australia.

To begin with, we conduct an "Application Value Assessment" workshop to learn about your environment and desired outcomes. From this workshop, we agree on suitable Microsoft Access application(s) to migrate.

Sometimes organizations are not aware of all the Access applications which exist on their network. If this is the case then we can run the 2SQL Inspector. The Inspector scans the entire network or whichever parts are requested for Access databases and log statistical information about them into one single SQL Server database repository.

Fujitsu then performs an in depth analysis of the database schemas, design and complexity using the 2SQL Detective tool to determine the conversion difficulty and likely issues. From this, accurate estimates of the cost, timeframe and resource requirements for undertaking the entire migration can be determined.

To perform the analysis using the 2SQL Detective, only the database is required and Fujitsu does not require any data, thus avoiding issues related to sensitive data. This analysis can also be performed onsite if required.

During the migration, the 2SQL Genie is used to automate the migration from Microsoft Access to Microsoft SQL Server as far as possible. Finally, the remaining small percentage of conversion is completed manually by the Legacy Modernization team.

To reduce risk, no functional changes are made during the migration. This also facilitates industrialised testing on the migrated application to ensure that the old and new applications function identically.

## Benefits

The Fujitsu Legacy Modernization service utilising the 2SQL migration toolkit automates the Microsoft Access to Microsoft SQL Server conversion process with 80%-90% completion of the full project. The remaining conversion work is completed manually to achieve the desired outcome.

This service has been proven to shorten migration project timelines by more than 80%. There is no requirement for retraining of users. The migration is transparent to end users, the Microsoft Access front end user interface remains unchanged but data processing occurs on the server.

The converted database fully leverages the server-side power, performance and abilities of Microsoft SQL Server and reduces client-side processing as much as possible. The service offers a repeatable, automated migration processes, leading to significant reduction in manual migration effort.

Microsoft Access databases converted using this service offer significant improvements in:

- Reliability
- Scalability
- Security
- Performance
- Maintainability
- Manageability

### Team

Access to SQL Server is a Global Legacy Modernization capability; each of the Legacy Modernization teams worldwide is able to assist your organisation in undertaking these projects.

Fujitsu's Legacy Modernization program for Microsoft Access to Microsoft SQL Server is based on the 2SQL toolset, created by our Australian partner, ConvertU2 Technologies.

The delivery team is global with local team members in most countries and supported by ConvertU2 Technologies.

### Interested in finding out more?

If you answer "Yes" to any of the following questions, please contact Fujitsu for a more in-depth discussion of our Legacy Modernization options for Microsoft Access to Microsoft SQL Server.

Fujitsu would be pleased to talk to you further about how we can work together to help you leverage the investments your organisation has made in legacy applications.

Fujitsu's Global Legacy Modernization Offering replaces the country based based Legacy Modernisation, TransMigration and HIPATS offerings.

### Critical Questions

- Do you have mission critical applications built using Microsoft Access?
- Are you concerned about the scalability and performance of Microsoft Access in a networked environment?
- Do you have large Microsoft Access databases or many concurrent users?
- Do you want to centralise your business data to facilitate disaster recovery and business continuity?
- Is Microsoft Access restricting your technical options?
- Is your organisation highly risk averse yet needing to move on?

If you would like to talk to us in person please send an email to the Legacy Modernization team in your local area. Email addresses are on the final page of this brochure. Or visit our website and take an online survey.

### About Fujitsu

Fujitsu is a leading provider of ICT-based business solutions for the global marketplace. With approximately 173,000 employees supporting customers in 70 countries, Fujitsu combines a worldwide corps of systems and services experts with highly reliable computing and communications products and advanced microelectronics to deliver added value to customers. Headquartered in Tokyo, Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.6 trillion yen (US\$50 billion) for the fiscal year ended March 31, 2010. For more information, please see [www.fujitsu.com](http://www.fujitsu.com).

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## FUJITSU LIMITED

[www.fujitsu.com/global](http://www.fujitsu.com/global)

**Australia and NZ** [Legacy.modernisation@au.fujitsu.com](mailto:Legacy.modernisation@au.fujitsu.com)

**US and Canada** [Legacy.modernization@us.fujitsu.com](mailto:Legacy.modernization@us.fujitsu.com)

**Brazil** [Legacy.modernization@br.fujitsu.com](mailto:Legacy.modernization@br.fujitsu.com)

**UK and Ireland** [Legacy.modernisation@uk.fujitsu.com](mailto:Legacy.modernisation@uk.fujitsu.com)

**Portugal, Spain, Germany and Russia** [Legacy.modernization@ts.fujitsu.com](mailto:Legacy.modernization@ts.fujitsu.com)

**Finland** [Legacy.modernization@fi.fujitsu.com](mailto:Legacy.modernization@fi.fujitsu.com)

**Sweden** [Legacy.modernization@se.fujitsu.com](mailto:Legacy.modernization@se.fujitsu.com)

**Singapore** [Legacy.modernization@sg.fujitsu.com](mailto:Legacy.modernization@sg.fujitsu.com)

**Hong Kong** [Legacy.modernization@hk.fujitsu.com](mailto:Legacy.modernization@hk.fujitsu.com)

**India** [Legacy.modernization@in.fujitsu.com](mailto:Legacy.modernization@in.fujitsu.com)