



We are now Refinitiv, formerly the Financial and Risk business of Thomson Reuters. We've set a bold course for the future – both ours and yours – and are introducing our new brand to the world.

As our brand migration will be gradual, you will see traces of our past through documentation, videos, and digital platforms.

Thank you for joining us on our brand journey.



REFINITIV[™]

The Refinitiv logo, featuring the word 'REFINITIV' in a bold, black, sans-serif font, followed by a trademark symbol (™). To the right of the text is a blue graphic symbol consisting of two perpendicular lines of equal length, forming an L-shape.

Thomson Reuters QA Direct

Cloud delivery of data for quantitative analysis

Frequently Asked Questions (FAQ)

What is Thomson Reuters QA Direct?

QA Direct® provides access to a huge range of content ready to use “out of the box” for quantitative analysis together with the tools to integrate your own proprietary data. This gives you direct access to best-of-breed content from Thomson Reuters and other leading vendors including S&P, MSCI and Russell. Freed from the burden of preparing data, analysts can spend more time developing and testing differentiated ideas, optimizing portfolios and managing risk.

And with QA Direct now available in the cloud, asset managers and hedge funds can avoid capital lock-in, eliminate database administration and get access to data for new quant initiatives, fast.

What are your timelines for adding more data into the solution?

The initial launch of QA Direct in the cloud targets the data sets in most demand by our clients. It allows you to get up and running quickly so you can begin building your research and production models. Throughout 2018, we will continue adding QA Direct data to the cloud offering, bringing data parity with the deployed version of QA Direct.

What QA Direct data sets can I access in the cloud now?

The following data sets are initially available:

QAD Core Database

- Security Master & Mapping
- Special Dates

Subset of QAD Data

- Datastream Pricing (Equity & Index)
- IBES Estimates (V2)
- Worldscope Fundamentals
- Worldscope™ Point in Time
- Datastream Index Constituents and Weights (ICW)
- StarMine™ Models
- Thomson Reuters Business Classifications (TRBC)
- Reference Data Convergence (RICs)
- PermID™

Are all the features offered in the deployed version of QAD available in this Cloud version?

You get all functional capabilities of QA Direct: instant access, symbology mapping, prop data mapping and back-testing.

Will this Cloud version change how we discover, purchase and pay for data?

No. It's the same order process as for the deployed version of QA Direct, only the delivery mechanism is different.

There is additional billing for the cloud delivery service.

Overall, what delivery options exist for QA Direct?

Deployed, Cloud (Microsoft® Azure) and Hosted Cloud (within your preferred cloud provider).

Deployed

QA Direct can be deployed on premise within your own server room, ideally on a dedicated system. QA Direct requires direct Internet or proxy access via HTTP or FTP. QA Direct is available as a Microsoft SQL Server or Oracle database. Please consult the Thomson Reuters Quantitative Analytics Technical Specifications for more details.

Cloud (Microsoft Azure)

QA Direct in the cloud is a cloud-based dedicated database instance using Azure SQL Database, all contracted through Thomson Reuters. It uses the same schema and entitlements system as deployed QA Direct. However, replication services replace existing tools including the Communicator and SmartLoader. Server maintenance is shifted to Microsoft (Operating System, SQL) as part of their Platform as a Service (PaaS) offering. QA Direct in the cloud is accessible via the public Internet; it requires a fixed IP address.

Hosted Cloud

Hosted QA Direct is deployed within your preferred cloud provider. It uses the same tools as deployed, on-premise QA Direct, including Communicator and SmartLoader. Server maintenance needs to be provided through your contract with your cloud provider, not Thomson Reuters. Hosted QA Direct uses the same schema and entitlements system as deployed QA Direct.

What is prompting your embrace of cloud technology for QA Direct?

Our customers are increasingly asking for access to Thomson Reuters data for quantitative research as a service.

Why was Microsoft Azure chosen for QA Direct in the cloud?

Since QA Direct is already available in Microsoft SQL and leverages its tools, we can take advantage of Microsoft's Azure SQL Database infrastructure and replication service. Therefore, it was selected as the best fit cloud environment.

What are the benefits of having a cloud (Microsoft Azure) delivery over deployed installation?

With the cloud solution, the model is simplified across the board:

- You will be no longer responsible for maintenance (servers, MS SQL, database performance)
- Rapid client on-boarding
- Faster delivery of updates
- Adding or removing content requires very little downtime
- Potentially reduces your total cost of ownership
- Scalable to meet your performance requirements
- Customers can use virtual machines on their side of the firewall
- An instance of QA Direct can be provisioned in the cloud in a matter of days to get you up and running with data ready to use for quantitative research with no delays

Thomson Reuters deals with database management and the continuous updating of content in the QA Direct database 24/7, ensuring system availability and resiliency and removing the admin burden from you. Scaling up capabilities is quick and painless.

Further, you avoid the capital lock-in associated with deployed quantitative data solutions. With a cloud quantitative solution from Thomson Reuters and Microsoft Azure, you pay for what you need right now. Our cloud offering releases capital tied up in infrastructure and saves operating costs by transferring data hosting to a trusted provider.

What are the technical specifications of QA Direct in the cloud?

QA Direct in the cloud is a dedicated Azure SQL Database utilizing Microsoft's Platform as a Service (PaaS). It accesses the same database as QA Direct and has the same schema. Updates are delivered via transactional replication which also enforces entitlements. There is an initial database snapshot followed by regular updates. Once updates are available from the source, they will be streamed in near real-time to the QA Direct in the cloud instance.

Our production environment is in Azure's East US 2 location. All client databases (and our replication master) are hosted in this region, regardless of the clients' physical locations. We plan to expand to other regions globally as demand requires.

Is the QA Direct in the cloud database secure?

Yes. Thomson Reuters controls access to the QA Direct in the cloud instance by allowing only the IP addresses provided by you. In addition, each user will have a log-in and password. Data is protected in transit via the requirement of a secure connection (by enabling a security parameter in the connection string). Data is also protected at rest via Transparent Data Encryption which is a default setting in Azure SQL Database.

Can I be confident in the security of my proprietary data within Azure?

You will contract directly with Microsoft to provision a separate server in Azure to load your proprietary data onto. This will sit alongside the dedicated instance of the QA Direct database also in Azure, making it possible to run queries, analysis and modeling that combine your proprietary data with QA Direct data – all in a single, highly secure cloud environment.

What is the QA Direct in the cloud price structure?

There are three components to QA Direct in the cloud pricing: storage, performance and egress.

Storage: QA Direct in the cloud includes 2TB of storage with the ability to add blocks of 250 GB to meet your requirements, up to the current limit of 3TB. A high storage tier is also available with a max storage of 4TB.

Performance: There are four tiers of service with different levels of compute power. Tiers 1-3 each include more compute power than the lower tier. The fourth tier offers more storage with lower compute.

Egress: This is the amount of data pulled out of Microsoft Azure. Egress levels will be monitored per client by the Thomson Reuters QA Compliance team. Thomson Reuters reserves the right to bill for egress overage.

How can I get a trial access to QA Direct in the cloud?

Thomson Reuters will offer shared QA Direct in the cloud instances with Thomson Reuters data (current and historical). Third-party content, such as data from Index providers, cannot be provided during trials. You will receive log-ins to access QA Direct in the cloud for a defined period of time. The commencement of a trial requires a signed QA Hosted Cloud Trial Agreement. You will need to provide a fixed IP address to Thomson Reuters Quantitative Analytics

Compliance team and open specific ports to access the trial instance of QA Direct in the cloud.

Are you migrating existing QA Direct users to the cloud?

We have no migration program and your deployed QA Direct will continue to operate as it does today. However, if you choose to migrate from deployed QA Direct to QA Direct in the cloud, then we will provide support to help you make the transition.

Do I need a separate SQL license?

No. The cost of an SQL license is included.

In the cloud, do I need to reserve excess storage like in the deployed version?

No. In the cloud, you are constrained by the maximum storage your tier provides. The three tiers (plus high storage option) comfortably store all data that is initially available.

Once we release more data later in 2018, if your content needs to go beyond your tier's maximum, you can move to the high storage tier.

Given your data needs, if you need more than 3 TB, the high storage tier is your best option.

Is there any maintenance I need to perform on the QA Direct in the cloud instance?

No. This is all performed by Thomson Reuters and Microsoft.

If I want to utilize an analytics server alongside, do I need to contract separately with Microsoft?

Yes. We are only providing a delivery mechanism for the data available in QA Direct.

Is Oracle supported in QA Direct in the cloud?

No. QA Direct in the cloud uses the Azure (Microsoft Azure SQL DB) platform software so Oracle is not supported. Oracle is only available for our QA Direct deployed delivery.

How is my database monitored?

An application will monitor all instances of QA Direct in the cloud. Any alerts generated from your QA Direct in the cloud instance (out of disk space, exceedingly high DTU utilization, update latency, etc.) will be seen by a 24x7 internal application support team for troubleshooting. If necessary, you will be contacted by the Thomson Reuters Technical Support team for resolution.

What support materials are available for QA Direct in the cloud?

- Deployed QA Direct support materials are applicable to QA Direct in the cloud. Go to Thomson Reuters My Account (my.tr.com) to download materials
- To learn more about QA Direct, visit financial.tr.com/qad

Whom should I contact at Thomson Reuters to learn more?

Please contact your designated Thomson Reuters sales representative or go to financial.tr.com/qad and select the **contact** menu.

Visit financial.tr.com/qad

