Mo.net
Financial Modelling in the Cloud with Mo.net

November 2020
Revision 7

Background

Over the last decade, cloud computing has emerged into the mainstream, with the majority of software vendors offering cloud versions of the products which have traditionally been installed on desktops and in data centres. Similarly, customers have started to embrace the benefits offered by cloud-based solutions.

While the potential opportunities of cloud computing for financial modelling are perhaps obvious, the industry has been relatively slow to adopt cloud-based solutions due to concerns about security and the portability of legacy modelling software. However, with the continued need to provide more detailed analysis & insight quicker and more frequently in order to satisfy the regulatory juggernaut, the discussion of financial modelling in the cloud has become a question of when and how, rather than if.

The Compelling Case for Cloud Computing

Over recent years, many organisations have adopted a cloud-ready or even cloud-first enterprise technology strategy for many of their line of business applications. The business agility and cost savings offered by cloud-based solutions has simply become too great to ignore.

Historically, organisations purchased their own hardware for installation in their own data centres, to be supported by their own dedicated staff. While this often provided the impression of stability & security, these resources are always finite and few organisations, if any, can afford to purchase the infrastructure & support to meet the needs of peak or unusual demand.

In stark contrast, cloud computing uses an operating expense model, with customers charged for the resources they actually use, rather than the resources that might be on offer. Furthermore, the lumps and bumps of the financial reporting cycle make cloud computing an ideal solution for the varied and unpredictable modelling needs of today's insurance companies.

Typical Utilisation Patterns

Some of the typical utilisation patterns of financial modelling software and other line of business applications are highlighted in the charts below. Clearly, any on premise data centre will need to provide for peak load, otherwise application users will be left waiting for available capacity. Similarly, providing more than maximum capacity means resource is wasted, but still paid for. The likelihood of having perfectly matched, i.e. flat capacity and demand in the financial modelling universe is very unlikely indeed.

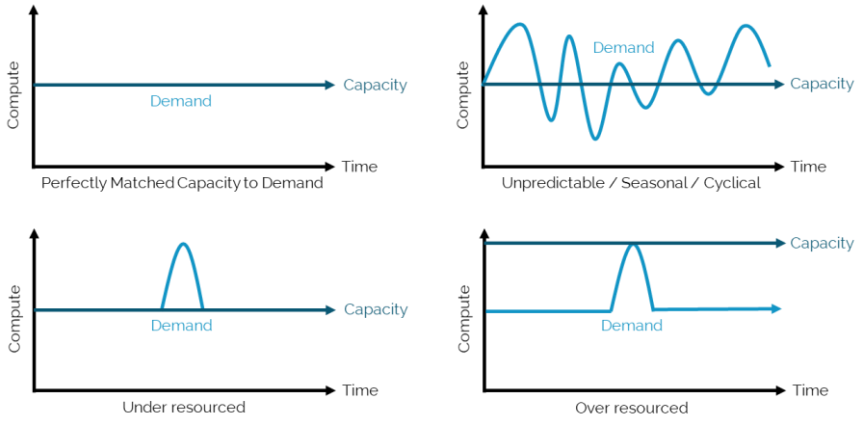

Figure 1 - Typical line of business application utilisation

The variability and unpredictable nature of the financial modelling universe is ideally addressed by the "pay for what you use model" of cloud computing.

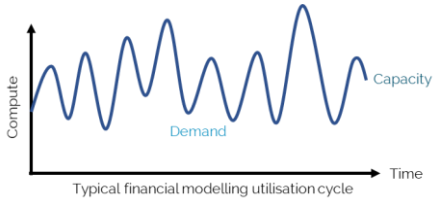

Figure 2 - Perfectly matched demand and supply with cloud resources

The Hidden Costs of On-Premise Resource

Clearly, the most obvious cost of on-premise resource is the initial hardware outlay. However, in most circumstances the more significant cost is the ongoing charge for backups, maintenance, air conditioning, support, software upgrades and patches. For smaller organisations these costs can be significant, with little opportunity for the economies of scale available to large multinational enterprises.

Introducing Mo.net Cloud Services

Mo.net Cloud Services is a collection of services and solutions designed to offer a truly comprehensive modelling solution in the cloud. Whether you are looking to reduce your on-premise hardware / software footprint, avoid burst capacity challenges, get continuous software upgrades or simply provide accessibility to modelling resources from anywhere at any time, Mo.net Cloud Services provides you with the flexibility required, all on a utility / pay for what you use basis.

Underpinned by Microsoft's industry-leading Azure platform, Mo.net Cloud Services provides all customers, regardless of size, with industrial-scale performance, security and flexibility at a fraction of the cost of equivalent on-premise resources & support.

Highlights of the Mo.net Cloud Service

Economics
Other than a minimum service provision, which provides a core level of support regardless of whether resources are running or not, the only changes relate to the hardware and software actually used

Performance
With access to relatively exotic hardware not usually available to most organisations, coupled with the modern, inherently high-performance Mo.net calculation engine, financial models can be run in a fraction of the time taken with legacy platforms and traditional hardware.

Flexibility
Mo.net Cloud Services put users in control of their financial modelling resources, both for development and operations. This allows customers to scale up and down according to their requirements, rather than attempting to predict & satisfy peak demand.

Licensing
Licensing is built into each of the Mo.net Cloud Service recipes, so users don't need to worry about making sure they have enough activations on their existing licences to use more resources. Customers are only charged for what they use on a per-day basis.

Scalability
Additional development or compute resources can be added almost instantaneously. Distribution of even the largest workloads can be easily managed using a combination of Mo.net Cloud Services and components of the existing Mo.net platform.

Integration
Mo.net Cloud Services come with ready-made recipes of the most common combinations of Mo.net platform components. These components are pre-configured to work together in an optimum fashion with no end-user interaction. Furthermore, third party applications, such as Microsoft Excel or PowerBI, can be added to any recipe providing a fully cloud-based modelling & analysis capability.

Accessibility
Mo.net Cloud Services are accessible from any device at any time. Resources can be left on for as long as they are required instead of having to fit operational activity within data centre support or backup cycles.

Support
Needless to say, Mo.net Cloud Services includes industrial-strength support from our client services and infrastructure teams. This leaves customers to focus on the business of modelling and analysis, rather than making sure the financial modelling software is working optimally. Customers can opt to receive continuous & automatic updates of Mo.net software to avoid the downtime usually experienced with software updates.

The Mo.net Cloud Modelling Portal

The Mo.net Cloud Modelling Portal provides self-service access to a range of preconfigured recipes appropriate to the needs of a variety of modelling use cases. Whether you are a lone developer wanted to build or modify a model for your own or client use, or an insurance enterprise wanting to run your entire modelling estate in the cloud, the Mo.net Cloud Modelling Portal provides you with a single interface from which to manage services, components, activity and billing.

Of course, customers aren't limited to the out of the box recipes on offer. Any combination of Mo.net platform components can be configured as part of bespoke customer recipe, so you have all the software you need available at the touch of a button.

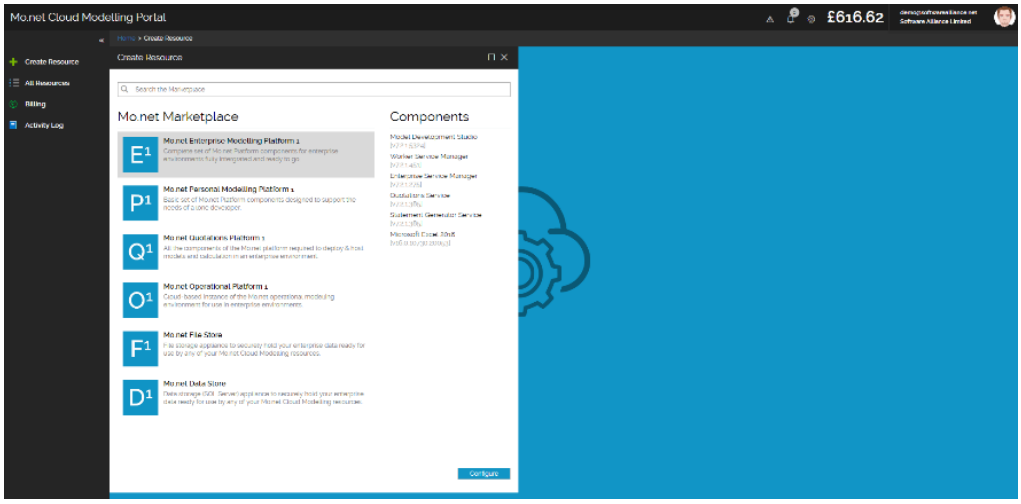

Figure 3 - Creating a New Resource from a Mo.net Cloud Service Recipe

Security Considerations

One of the biggest barriers to cloud adoption has traditionally been the concern about the security of data and IP outside of the enterprise firewall. However, the reality is that data at rest and in transit to the cloud is likely to be more secure than any organisations enterprise data centre or network. Microsoft's Azure platform benefits from industry-leading security processes, and is focused on protecting data and other assets placed in the cloud.

What About Data?

Clearly financial models are only useful if they have appropriate access to data & assumptions, and model results are accessible to downstream processes. Mo.net Cloud Services provides secure file and database storage resources which can be used to store model inputs, assumptions and results. Each can be securely replicated back to an on-premise copy if required.

Contact Us

For more information regarding Mo.net Cloud Services and the Mo.net Cloud Modelling Portal, or to discuss the opportunities of cloud modelling for your organisation, please contact us.

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Path to the Clouds

Clearly financial modelling is not going to move to the cloud overnight, which is why we are recommending experimentation. This will help you understand how to make the most out of the opportunities offered by cloud, and also how to refine existing business processes & organisational structure to maximise the investment in your cloud journey.

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