SYNCHROWORKS
CONSULTING

SECTION 6

Assess Your Current Environment

In migrating to the cloud, you first need to get a better understanding of your applications, how many servers and/or virtual machines you have, and how you'll need to plan to move them to the cloud.

Uncertainties about the total savings and perceived complexity can get in the way of taking this step. Many organizations have come to realize that moving existing workloads to the cloud can yield significant benefits.

Justifying the investment requires confidence that you'll save a significant amount on operational costs, and that your current workloads will work as expected in the cloud.

Many workloads can run immediately on most cloud platforms without modification, while other workloads that have operational and application dependencies in an on-premises environment require further analysis and planning. If your applications are made up of multiple servers or virtual machines, then consolidated planning must be done to identify these and shift them to the cloud. This is not a manual process, and you'll need intelligent planning tools to do it. Similarly, getting accurate cost comparisons can be challenging when you're estimating the load and cloud VM series type. Without automated analysis to map on-premises capacity to VM instance, your estimations may fall short—causing performance issues. On the other end of the spectrum, your estimations may go too far—stretching your budget.

ASSESS IN FOUR STEPS

Technical and business planning for migration comes down to four straightforward steps:

01
ASSESSMENT OF ON-PREMISES APPLICATIONS AND SERVERS

02
IDENTIFICATION OF APPLICATION AND SERVER DEPENDENCIES

03
CONFIGURATION ANALYSIS

04
COST PLANNING

01

ASSESSMENT OF ON-PREMISES APPLICATIONS AND SERVERS

It's likely that your organization runs multiple servers and or virtual machines. While your current management tools may represent these clearly, to kick-start any migration you'll need an assessment mechanism that can feed data into subsequent steps.

Discovering servers and virtual machines is usually a straightforward process. It relies on interaction directly with the endpoint (using an agent) or managing hypervisor (such as vSphere or Hyper-V). Ultimately, the goal of the assess phase is to collect server and application information, including type, configuration, usage, and applications that may be running.

02

IDENTIFICATION OF APPLICATION AND SERVER DEPENDENCIES

Once discovery is complete, you'll need to map any dependencies or communication between your servers (and applications). This is critical because when migrating an application, you need to know all the servers and processes the app is using.

Many tools provide server dependency mapping but don't extend to application dependencies. To ensure a full picture of all communication between workloads, you need a tool that will do both. This will allow you to create visual maps of all your applications and workloads, which enables their interaction as a single entity for costing, configuration analysis, and eventually migration.

03

CONFIGURATION ANALYSIS

The assess process enables you to ensure that each workload will function on your cloud platform. Through the collected analysis, assessment tools will be able to provide metrics on the compatibility of the workload in the cloud. For example, is the workload OS supported? Or are there specific hardware dependencies that may not be replicated in a cloud environment (such as running a UEFI boot, which is larger than a 4 TB data disk size)?

Configuration analysis should tell you which workloads will migrate with no modifications, which workloads might require basic modifications to comply, and which workloads are not compatible in their current formation. This analysis will also provide guidelines to remediate potential issues or recommend configuration changes.

04

COST PLANNING

The final step of the assess phase is collecting resource usage reporting (such as CPU, memory, and storage). This is important, as on-premises virtual machines are often over-provisioned but actually utilized under 20 percent. If you were to take the physical configuration of your on-premises server and map this to an IaaS VM series type, you would likely find that you were paying for more performance and scale than you need. Since the cloud is costed as a usage model, you should ensure your choice meets both performance and economic targets. The goal in any cloud model is to drive your virtual machines to at least 90 percent utilization, while making sure you meet performance and reliability goals. Through historic resource analysis, intelligent cost analysis tools can determine the actual usage of your workload and suggest the best cloud IaaS VM series to use.

SYNCHROWORKS
CONSULTING

2-3000 Langstaff Rd
Concord, Ontario
L4K 4R7

1.866.960.9409
info@synchroworks.net
www.synchroworks.net

V.210222