Cloud Target Architecture with Txture

Technical Brief

Txture calculates alternative cloud target architecture proposals for both individual applications and the entire application portfolio. Besides considering the recommended 6R migration strategies and assessment outcomes for each application, the most suitable cloud vendors, cloud services and service configurations are identified and expected run costs are estimated. Cloud target architecture proposals are calculated in the Txture solution by involving the Cloud Knowledge Engine that is centrally managed by Txture.

Cloud Proposal Calculations

Txture's Cloud Knowledge Engine automatically computes cloud target architecture proposals for on premise and cloud to cloud migrations. To do so, it processes the following inputs:

Target Architecture Preferences

The target architecture preferences reflect a client's cloud strategy by configuring all preferred cloud service providers (both public or private cloud stacks), datacenter hosting locations, service models, carbon footprint or required certifications. Preferences are ideally set initially but can be adjusted at runtime too. The preferences for generating target architectures either apply globally for all applications, for groups of applications, or for individual ones. This helps to express nuances of the cloud strategy, for instance across departments.

Application and IT Landscape Data

The application and IT landscape data is the second ingredient based on which the target architecture calculations are carried out. To get a comprehensive picture of the application including the business, compliance, security, and technical aspects, Txture offers a flexible collection of data via discovery, generic and vendorspecific connectors for all sorts of data sources like CMDBs, virtualization environments or in-house data management solutions. Additional information can be collected via integrated online surveys or graphical modeling to ensure data quality.

Cloud Proposal Contents

	Recommended Cloud Provider
Q	Cloud Services (IaaS, PaaS, DBaaS, CaaS, SaaS)
•	Migration Strategy (6R)
\bigcirc	Industry & Security Certifications
	Expected Costs
	Carbon Footprint Estimates

Based on the target architecture preferences and application data, Txture generates proposals for a cloud deployment (see Figure 1). To achieve this the Cloud Knowledge Engine scans Txture's up-to-date holistic multicloud knowledge base to identify appropriate cloud service replacements for the given application deployment.

Usually there exist multiple migration options involving different service providers and technologies. Txture selects the most promising target architecture proposal for every application, but offers the view on alternatives as well. Each proposal also displays different pricing models like upfront payment or commitments.

If required, every target architecture proposal can be adjusted e.g. to cater for new expected load profiles or planned cloud-native approaches.



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Figure 1: Target architecture proposal overview for a single application. Proposals are ranked based on how well they match the expressed target architecture preferences. Detailed reports on the bill of materials, service configurations, etc. can be accessed from here.

The Cloud Knowledge Base

The Cloud Knowledge Base as part of the Cloud Knowledge Engine is a central component in Txture's value proposition. It currently contains more than 440,000 managed, up-todate cloud services information across 13 prominent public cloud providers and several private/hybrid cloud stacks as well.

In addition to public cloud service information, also customer private clouds can be added. Adaptations to the Cloud Knowledge Base can be suggested from within Txture and Txture's Cloud Insider and are always reviewed by Txture's cloud knowledge engineers.

1k+	Cloud Products
440k+	Product Variants
59+	Certifications
300+	Locations





Figure 2: Activities and data flow for calculating cloud application target architecture proposals. For information about greyed out parts, have a look at the technical brief on Txture's "Cloud Readiness Assessment".

Proposal Generation Process

Target architecture proposals are generated based on Txture's knowledge of used on-premises (or existing cloud) technologies and how they can be mapped to services of the strategic cloud providers of your choice. Based on the assessed application landscape data and your individual target architecture preferences the Txture Cloud Knowledge Engine generates suitable target architecture proposals (see Figure 2). Proposals are generated involving infrastructure services, platform services, containers and even software as a service. Next to the technology match-making, e.g. a cost or data center location perspective is provided as well. A variety of capabilities support the efficient modeling of cloud application target architectures, e.g. the pinning of preferred cloud service types, avoidance or defined replacement strategies for technologies and vendors, picking right-sized cloud service instances, picking instances with low carbon emissions, and many more.

Key Takeaways for Cloud Target Architecture Proposals

Target architecture proposals are generated based on target architecture preferences, the application and IT landscape data and detailed cloud services information stored in the Cloud Knowledge Base.
Txture's target architecture preferences allow to take the cloud strategy into account, such as the preferred service model, cloud provider or location.

• Target architecture proposals respect current on-premises and cloud technologies and suggest target cloud services for all service models (IaaS, PaaS, DBaaS, CaaS, SaaS), including monthly cost.

• Customer-specific private cloud options can be added to the Cloud Knowledge Base, thus providing comparability of public and private cloud deployment alternatives.

Do you want more info about Target Architectures with Txture?

Get in touch!