

The Migration of Web Applications to the Cloud Environment

By

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Agenda



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- ✓ Sify Software Ltd. Overview
- ✓ The Cloud Distinctions
- ✓ Why Cloud Modernization & Migration
- ✓ The Cloud Migration Methodology
- ✓ The Leading IT Resources for Cloud Environment
- ✓ The Cloud Application Assessment Analysis
- ✓ The Cloud Migration Cost Analysis
- ✓ The Criteria for Cloud Deployment Model
- ✓ The Criteria for Cloud Delivery Model
- ✓ The Criteria for Cloud Application Evaluation
- ✓ The Application Migration to Amazon Cloud
- ✓ The Cloud Migration Risks

Software Solutions



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Products & Solutions

KSmart - integrated offering of content & collaboration platform

- Enterprise Messaging
- Enterprise Content Mgmt
 - WorkFlow
 - Forms builder
 - BPM
 - DMS
 - Web Content Mgmt
- Learning Portal
 - LCMS
 - Assessment Engine
- Project Mgmt & Budget Tracking
- Employee Self Servicing Intranet Portal (eWorld)

mPower - Integrated biz acceleration apps

- mERP (Forum)
- SD Portal
 - ERP Connectors
 - Mobile Apps
 - Analytics & BI
- Sourcing Apps
 - SRM
 - eProcurement
 - Contract Mgmt
- SFA & CRM
- Support HelpDesk
- MidSize ERP

sCloud - Integrated IT Infra & Cloud Management Tools

- Monitoring & Assurance Tools
- Service Automation Tools
- Service Delivery Mgmt Tools

Services

App Services

- Professional Services
- Enterprise Architect
- Web & Mobile Dev
- App Maintenance
- 24x7 App Support
- QA & Testing

Delivery Services

- Online Assessment
- Scanning Services
- S/w Roll Out Services

VAR Services

- Licensing (MS & Oracle)
- Partnership Products
- Scanners
- BioMetric Devices
- Mobile Devices

Verticals

BFSI

Retail
&
Mfg

Govt

Telecom

Education
&
institutes

The Cloud Distinctions

- Coupling the Mainframe Computing (Centralised and High-Throughput) and the Modern Computing (Distributed and Flexible)
- Creating and sustaining an illusion of infinite processing and storage
- Representing the Cluster of State-of-the-Art Enterprise Technologies
- Ensuring higher IT Utilization
- Providing High Agility, Affordability & Accessibility
- Transitioning to Green, Lean, & Elastic IT Environment
- Elucidating Consolidated, Virtualised, Automated & Shared IT
- Breeding a cornucopia of Innovations in both the Business & IT Spaces
- Guaranteeing the IT Non-Functional Requirements (Performance, Availability, Scalability, Sustainability, etc)
- Setting the foundation for the smart, converged, & on-demand IT

Why Migration?



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Need More Compute Power & Storage & Free up Local Resource.

Avoid Costs/Problems of Local Resource Hosting

Flexibility / Scalability

Discontinuous Demand & Rapid Growth / Decline

Automated Provisioning of IT Resources

Pay only for what you use (Switching from Capex to Opex)

Local Networking / Bandwidth Constraints

Transparent Technology Refresh

Ubiquitous Access & Self-Service

SaaS removes the need to manage both the application and the infrastructure on which the application is deployed

The Cloud Migration Methodology

1. **Application Portfolio Assessment** for application's readiness for the cloud using a multi-dimensional analysis
2. **Cost analysis** for impact on TCO / ROI for constructing the business case
3. **Migration Strategy** per Application

4. **Migration Paths:** Cost-Effective & Cost-Advantage

Cost-Effective – Re-hosting the application in a Cloud Server without making any modification. Migrating applications to cloud vendors like Amazon EC2 or Rackspace falls under this category

Cost-Advantage – Transitioning the application into multi-tenant and hosting it in Cloud server.

5. **Migration Risks**
6. **Migration Planning**

The Leading IT Resources for Cloud Environment



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Legacy & Batch Applications

Enterprise Applications

High Performance Computing (HPC) Applications

Web (1.0 & 2.0) & Desktop Applications

Mobile, Messaging & Mail Applications

Databases & Data Warehouses

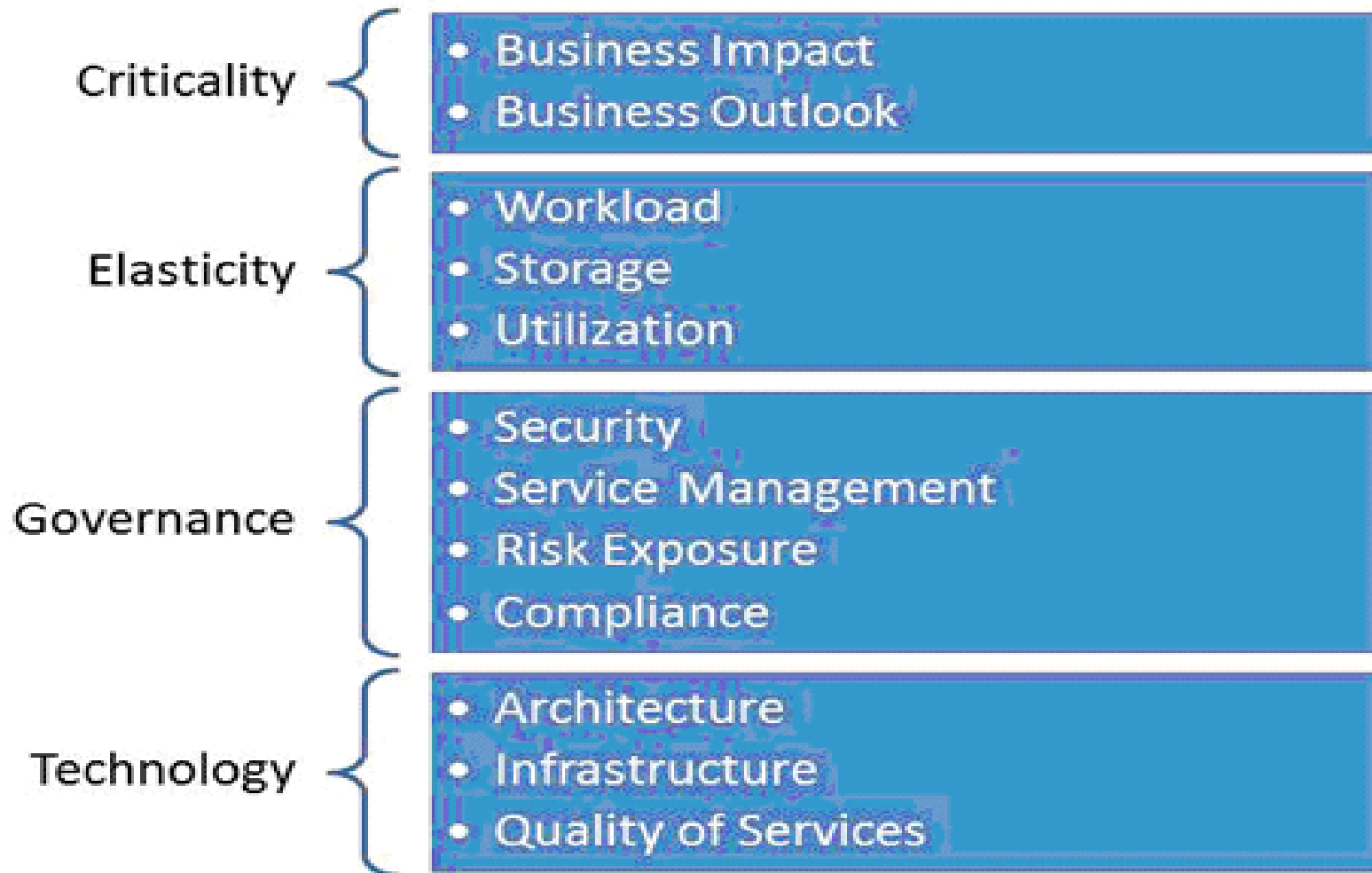
Integration Backbones Identity, Integration, Commerce & Application Servers, & Business Intelligence (BI) Servers

IDEs & Integration Appliances

Cloud Application Assessment Criteria



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The Cloud Migration Cost Analysis



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Capex

- Servers
- Storage
- Backup
- Network Equipments
- Real Estate

Opex

- Energy
- Personnel
- Computing Power
- Bandwidth
- Maintenance
- Support

Overhead

- Migration
- Skills
- Governance



Enterprise

- Managing stakeholders' interests
- Minimizing Risk Exposure

Governance & Operations

- IT Service Management
- Maintenance and Support
- Skills Management

Implementation

- Security and Privacy
- Failover, Disaster Recovery
- Multi-tenancy

The Criteria for Choosing a Cloud Delivery Model



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For SaaS

1. **Service-Level Agreement (SLA)**
2. **Data Portability**
3. **Long-term Costs**
4. **User Management**
5. **Security**

For PaaS

Platform Management & Scalability

For IaaS

Security, Scalability & Self-Service

The Criteria for Choosing a Cloud Delivery Model



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Public & Private Clouds

1. WAN Traffic
2. Data Security & Management
3. Legacy Application Integration
4. Security & Compliance Needs

The Criteria for Cloud Application Evaluation



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1. Multi-tiered Architecture
2. Scale-Up Architecture
3. Scale-Out Architecture
4. Cloud Application Geography
5. Application Dependency Mapping
6. Application Profiling

Application Migration to Amazon Cloud

Web Application Deployment Architecture

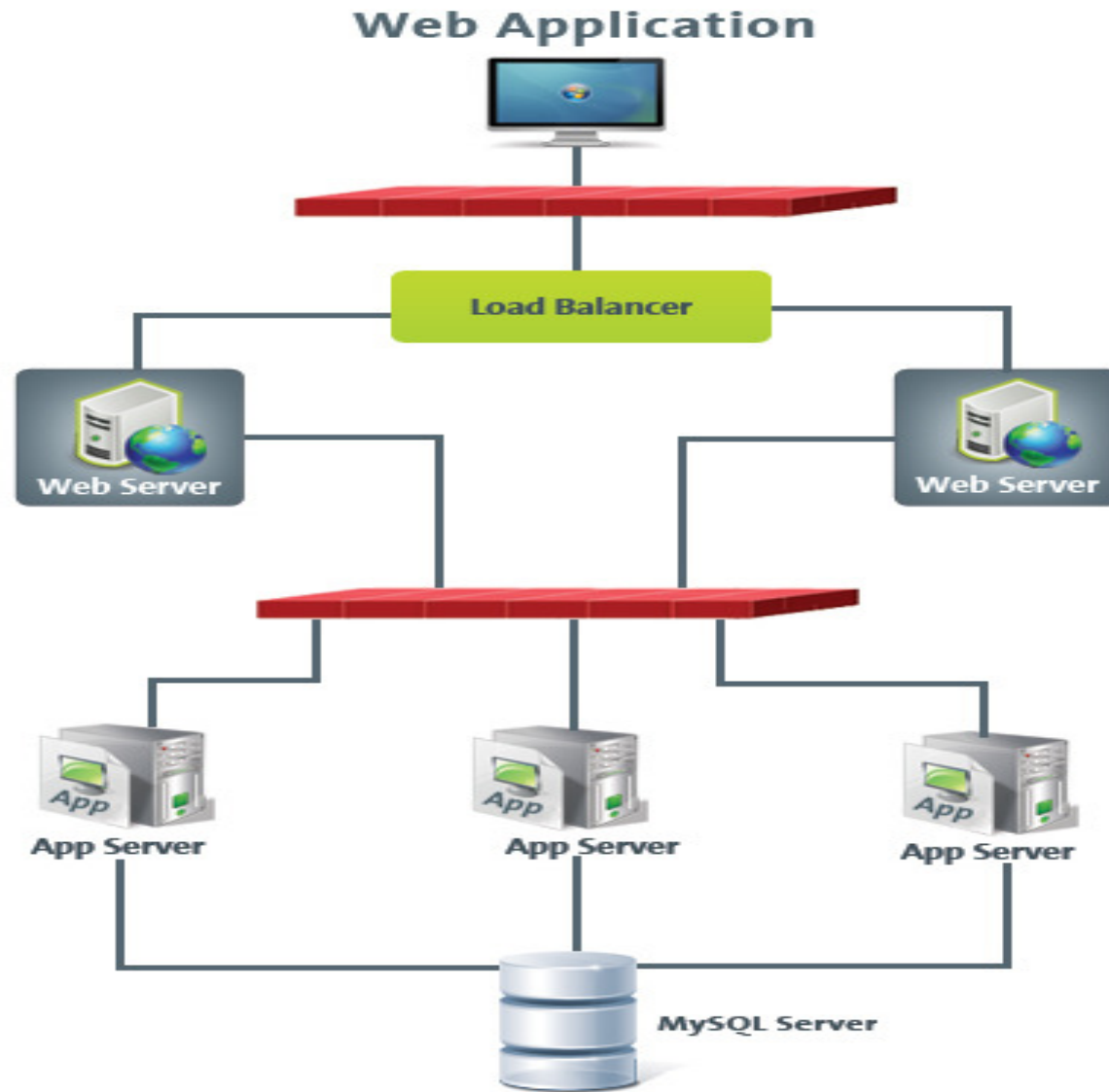
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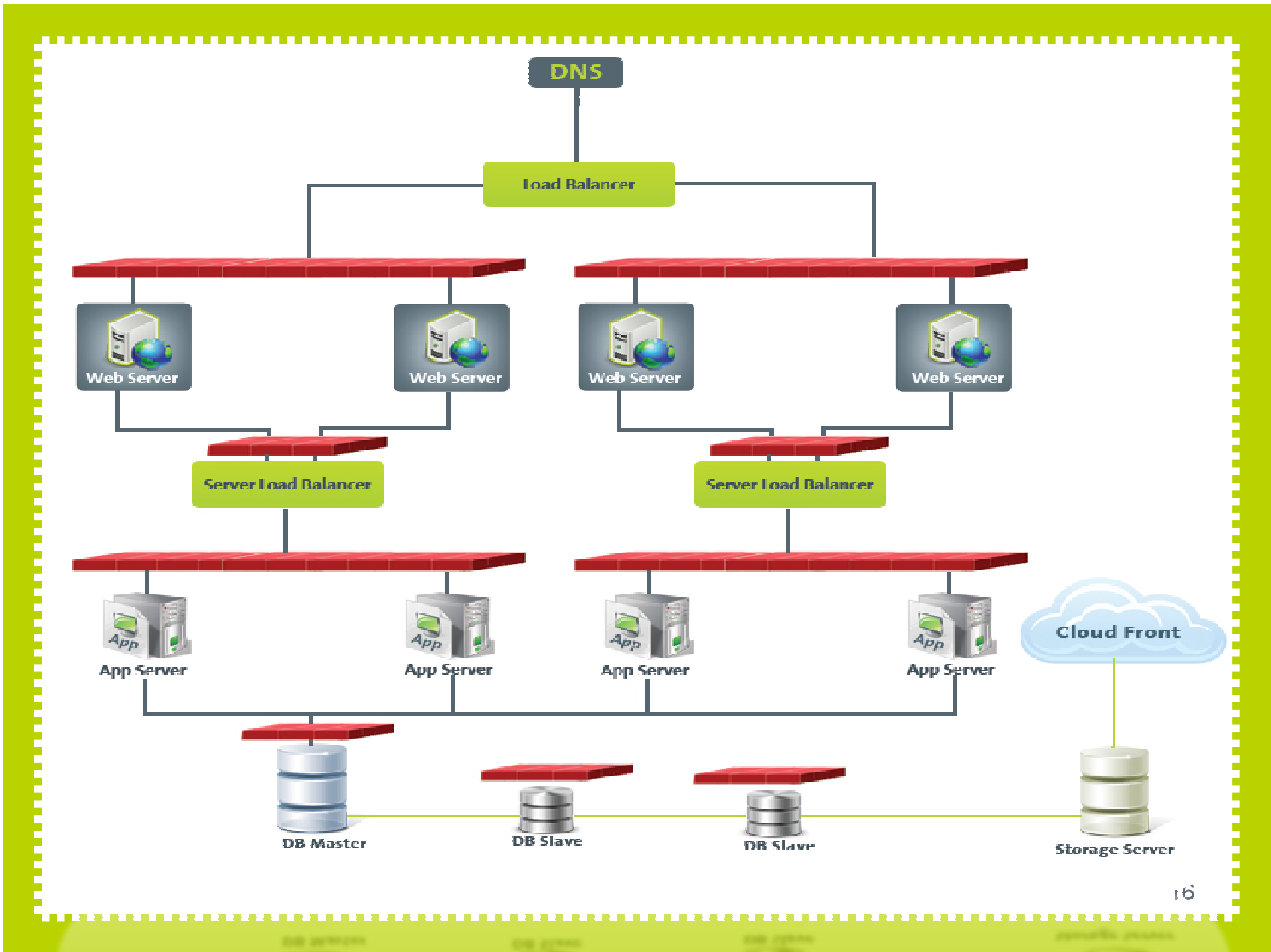
Cloud Application Deployment Architecture

A Typical Web Application Architecture



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Risks of Cloud Migration

- SLA Measurement & Management
- Compliance to Rules & Regulations
- Vendor Lock-in
- Security & Privacy
- Lack of Standards
- Lack of Visibility, Controllability, & Auditability
- Legal and Regional Issues



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Thank you

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