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Monitoring Cloud Applications

Session Code: AR10

Assumptions:

Basic understanding of Windows Azure

    Roles, Role Instances

    Blobs, Tables, Queues

How to build a simple Windows Azure app

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Need to Monitor the State of the Application

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State of the Application

Logging

Developers, Debugging

Business Process Auditing

Security, Compliance

System Stability

Infrastructure

Validation of Business Assumptions

Problems

Can't put application in the debugger

No physical or remote access to the machine

Event logs, IIS logs, App logs

You may not know where your app runs

Run behind a load balancer
Queuing introduces indeterminism

Distributed applications are more complex

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Azure Diagnostics API lets you monitor and collect diagnostic data.

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Don't confuse this with the Management API.

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Supports Standard APIs

System.Diagnostics.Trace

Windows Performance Counters

Windows Event Logs

IIS Logs

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Enhancements

Collect data from multiple Role Instances

Store collected data in Azure Storage

Control Collection without Service Upgrade

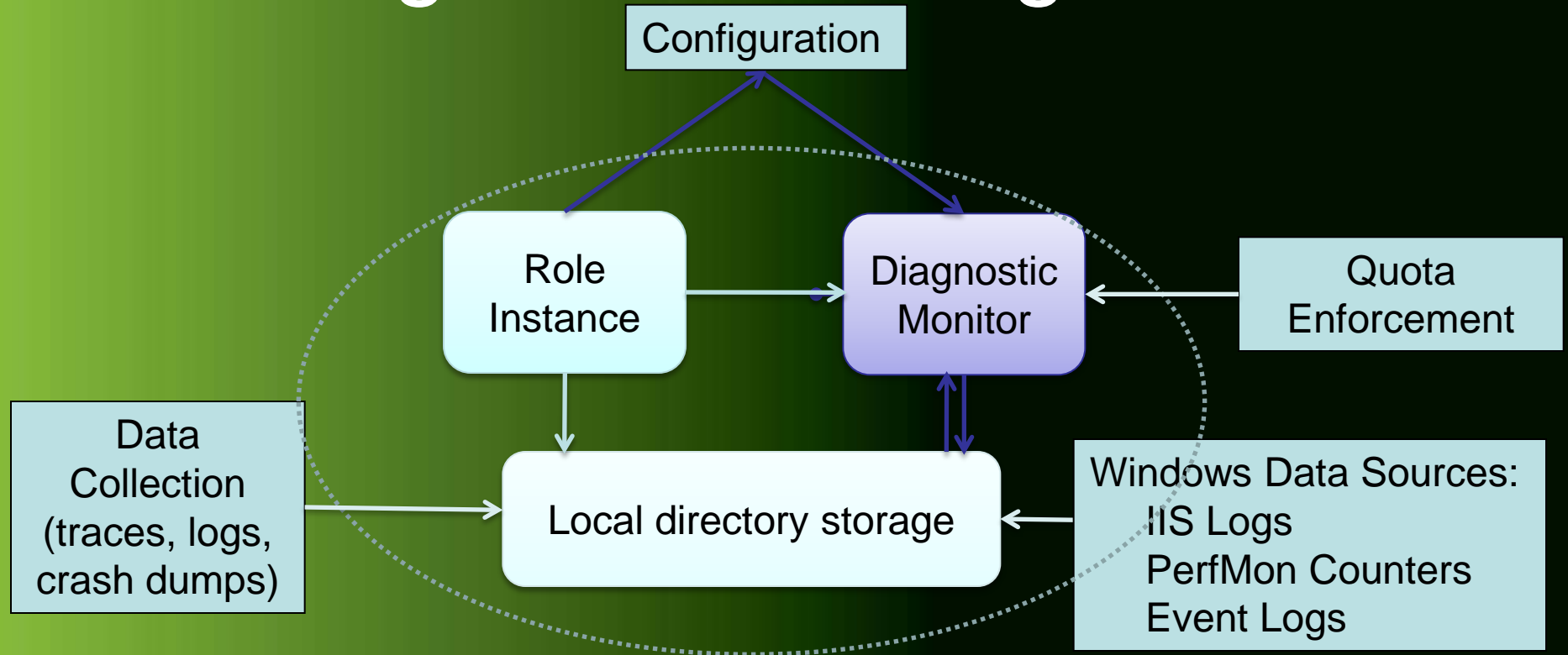.Net ■ conference   SharePoint ■ conference   CoreSystems ■ conference
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Diagnostics Configuration

Configuration

Role Instance

Diagnostic Monitor

Quota Enforcement

Data Collection (traces, logs, crash dumps)

Local directory storage

Windows Data Sources:
IIS Logs
PerfMon Counters
Event Logs

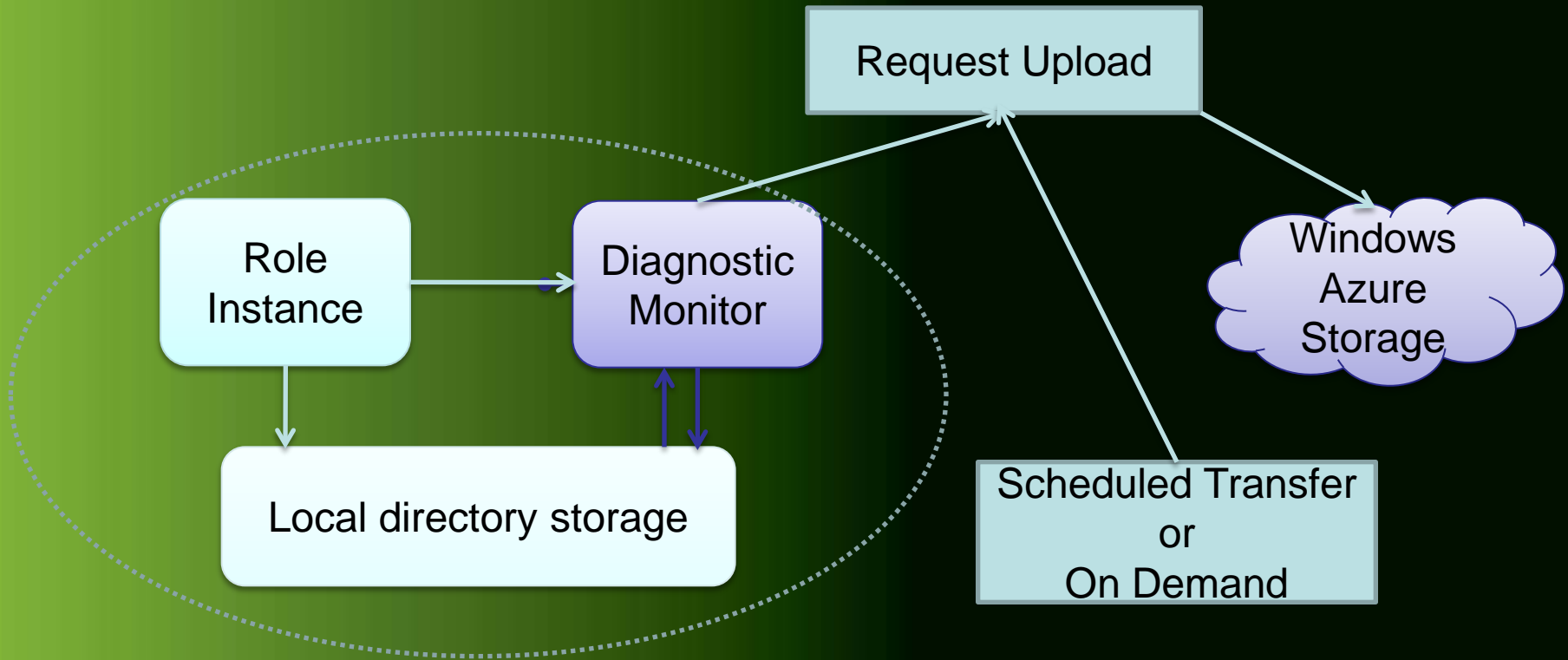.Net ■ conference   SharePoint ■ conference   CoreSystems ■ conference
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Diagnostic Data Access

Request Upload

Windows Azure Storage

Role Instance → Diagnostic Monitor

Local directory storage

Scheduled Transfer or On Demand

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Namespaces

Microsoft.WindowsAzure.Diagnostics

Microsoft.WindowsAzure.Diagnostics.Management

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Basic Diagnostics Demo

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On Demand Diagnostics Demo

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Suppose you wanted to add a PerfMon counter to search for a capacity constraint?

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Dynamic Configuration Modification Demo

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Storage Tradeoffs

Charged for Table and Blob Storage

    can move it offline

Local buffers are aged out if filled up

Query on table data not always efficient

    can filter by verbosity level

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Data Sources

Data Source	Collected By Default?	Data Format
Windows Azure Logs	Yes with Trace Listener	Table
IIS 7 Logs	Yes	Blob
Infrastructure Logs	Yes	Table
Failed Request Logs	No	Blob
Event Logs	No	Table
Performance Counters	No	Table
Crash Dumps	No	Blob
Custom Logs	No	Blob

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Azure Service Dashboard

Health Status of Windows Azure Platform

Available as RSS feed

www.microsoft.com/windowsazure/support/status/servicedashboard.aspx

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Scenarios

Scheduled Transfer

Development
Billing, Security, Compliance, Monitoring

Transfer on Demand

Debugging Problems

Modifying Diagnostic Monitor Configuration

Performance, Capacity Scaling Analysis

Summary

Monitoring and Diagnostic classes available

Use standard Windows Diagnostics API

Developer controls data collection

      timed or on demand transfer to storage

Evaluation form

Vul je evaluatieformulier in en maak kans
op een van de prachtige prijzen!!

Fill out your evaluation form and win one of
the great prizes!!

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