APPLICATIONS HEALTH MONITORING AND MODELING

ENHANCING MICROSOFT'S DINAMIC SYSTEMS INITIATIVE

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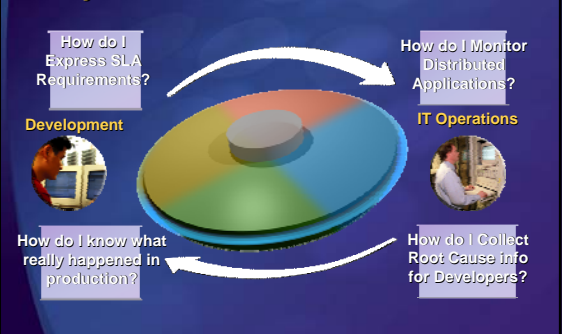AVIcode, Inc.

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Agenda

- Problem overview
- Application Health Modeling with VS TS for Architects and AVIcode MP Generator
- Application health monitoring with MOM 2005 and AVIcode .NET Management Pack
- Incident and Problem management process with VS TS and AVIcode TFS Incident Management Connector
- Q&A

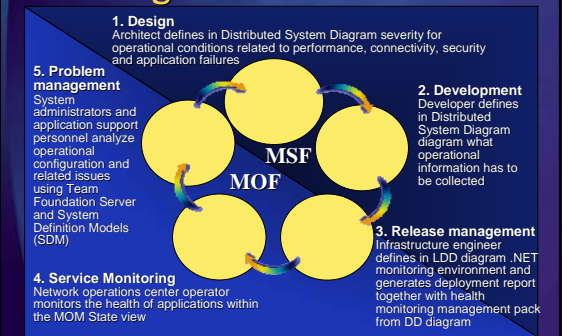# Application Challenges Span the IT Life Cycle...

Information Technology Operations

- Unreliable incident detection
- Manual incident detail recording and classification
- Incorrect problem attribution
- Time consuming problem replication

"Why was it reported at fine coding"

"How do I monitor your .NET application availability in production?"

"How should I know I didn't write the code"

Development

Knowledge Across The Application Lifecycle

How do I Express SLA Requirements?

Development

How do I Monitor Distributed Applications?

IT Operations

How do I know what really happened in production?

How do I Collect Root Cause info for Developers?


What Is Needed?

- **Processes** and tools to implement operational manageability during development
- Collaborative **platform** that is used by both development and operations
- **Standardization** of application health monitoring information and integration with existing infrastructure monitoring tools
- Establish **feedback** of operational incident information to application support systems

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Process: Health Modeling and Monitoring

1. Design
Architect defines in Distributed System Diagram severity for operational conditions related to performance, connectivity, security and application failures

2. Development
Developer defines in Distributed System Diagram what operational information has to be collected

3. Release management
Infrastructure engineer defines in LDD diagram .NET monitoring environment and generates deployment report together with health monitoring management pack from DD diagram

4. Service Monitoring
Network operations center operator monitors the health of applications within the MOM State view

5. Problem management
System administrators and application support personnel analyze operational configuration and related issues using Team Foundation Server and System Definition Models (SDM)

MSF
MOF

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Platform: Visual Studio Team System and AVIcode Intercept Studio

- Visual Studio Team System (VSTS) provides a collaborative platform
  - Modeling infrastructure
- AVIcode Intercept Studio provides a .NET monitoring platform
  - Integration with MOM 2005 and Team Foundation Server
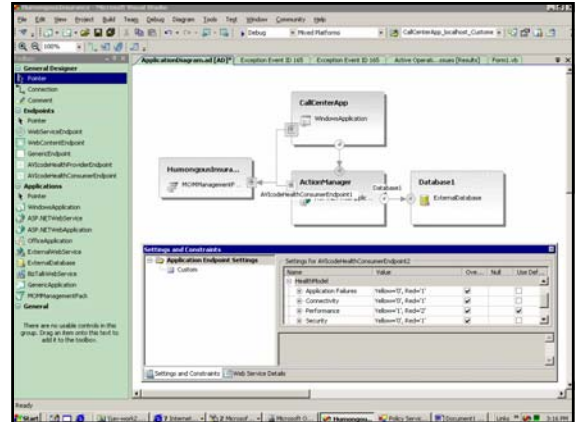
Standardization: Model-Based .NET Management Pack Generation

- Management pack interprets information collected by AVIcode .NET monitoring infrastructure
- Provides view into application health state transition
  - Performance
  - Security
  - Connectivity
  - Application failures
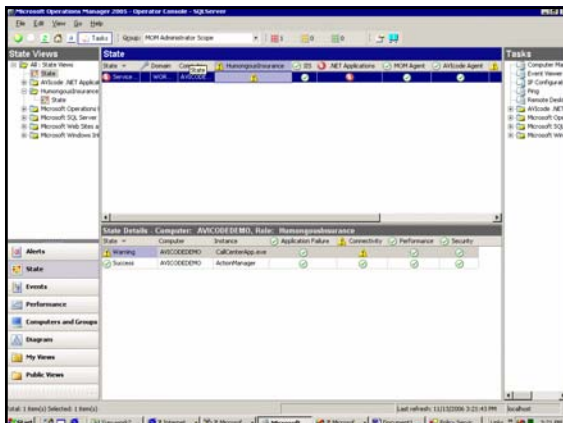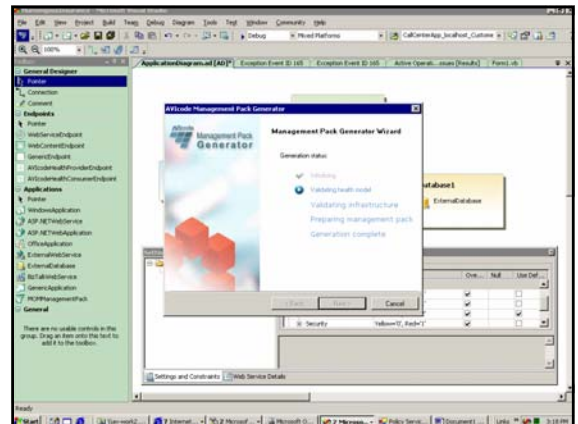
Feedback: Application Support Process

- AVIcode TFS Incident Management Connector creates work items for every unique operational defect
- Operational defect contains the root cause information collected by AVIcode Intercept Agents

Thank You !

- AVIcode .NET Management Pack is available for download from Microsoft Web site:
  - http://www.microsoft.com/downloads/details.aspx?FamilyId=773CD14A-5763-4739-B775-81416C831846&displaylang=en
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