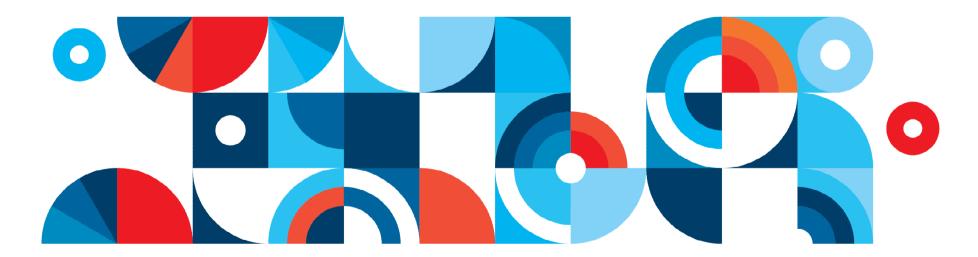


Xavier Giannakopoulos, Product Management

# Unattended Cloud Application execution with SmartCloud Workload Automation





# Agenda

- Unattended Cloud Datacenter
- Visibility Control Automation
- E-Commerce example
- Workload automation and cloud
- Addressing the challenges
- Simplifying workload management
- ■Why IBM



## Ready for the second wave of Cloud requirements

- ✓ Lifecycle automation is a crucial item for customers.
- Workload Generation is a delicate development items where large effort might be spent.
- ✓ Unified TWA interface delivers excellent visibility through unified interface
- Governance features provide strong control to cloud administrators business owners
- Multi-environment management provides governance in large corporation
- ✓ **Dynamic features** deliver automated and **optimised** execution of the workloads









How Unattended culture provides great benefits in the Cloud context

## Through Integrated Service Management capabilities that provide enhanced visibility, control and automation

## **Visibility**

Gaining real-time, integrated visibility into entire infrastructure for monitoring its health and finetuning performance for improved operational agility and prioritized response.

Respond from anywhere and make better decisions

#### Control

Managing business and IT assets including cost, security, change, usage and compliance



Improve quality and reduce risk

#### **Automation**

Automation of the IT environment, from end-to-end, to streamline costs and improve quality of IT services delivered to the business, its suppliers and customers. Lower cost and build agility



#### **Unattended visibility: Summary and Drill-down**

- Personnel for SCWA is either online, or offline. needing deep drill capabilities for the first case, and bird's-eve views for the second.
- Personal workload summary for business users
- Control operation on all remote applications, from Distributed or Mainframe

#### **Unattended control: Policies and Reliability**

- When rules are decided, they can be enforced strictly with low effort. Service is delivered automatically and within boundaries
- Pervasive auditing to leave a track
- Automated reliability thanks to corrective actions

#### **Unattended automation: Optimisation**

- Optimise execution thanks to integrated balancing
- Develop more powerful solution in the Unattended execution framework
- Reach applications through out-of-the-box integrations

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## **SmartCloud Workload Automation**

## IBM Unattended execution in the Cloud

**IBM SmartCloud Workload Automation** is a general-purpose Workload Automation modeler and executor.

a true Infrastructure-as-a-Service cloud, reducing cost and providing a highly scalable, rapid-deployment environment with near- zero downtime and automated recovery across heterogeneous platforms.

#### What's New?

**Self-Service catalog** to repackage existing and new automation assets as an offering for Business end users

**Dynamic agents** natively handled, and used by the product for better availability and optimisation

**Standardized** governance over object audit, history, change tracking and promotion

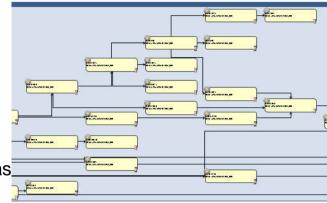
**Natively reach out** to most common applications like SAP, Oracle, Cognos, Datastage, Informatica

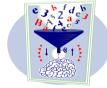
Pricing per job to match more closely the delivered value

#### **Business Value:**

**Enterprise solution** designed to meet business growth, organic or merger **Governance** at all levels to ensure smooth go-live, and avoid mistakes **Facilitate Business discussion** by enabling self-service request catalog of standard procedures

**Cloud embedding** through integrations with all main components of cloud management (Storage, Monitoring, Provisioning)





Display Name ^	Status ^	Availability ^	CPU Usage ^	Free Memory ^	į
twsagent	✓ Online	Available	22%	1262/3472 MB (36%)	(
REMENG	online	Available	0%	0/0 MB (0%)	(
twsftaagent	Online	Available	19%	1267/3472 MB (36%)	(
nc125165	online	Available	0%	29/3017 MB (0%)	(

#### **Learn More:**

http://www.ibm.com/software/tivoli/products/workloadautomation/

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## Clients need access to customized business data...

**E-Commerce** 



A Business Analyst needs for the shoes section to be included in a Discount special action during next week-end, calculating an estimated additional revenue.







A salesperson wants the report on week-end sales on Monday by 8:00 AM





An HR person wants to send the list of persons on extra-time to Industrial relations before Friday 4 PM

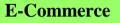


- •Rich Business Process descriptions, accessible according to role
- Possibility to tune process descriptions to new conditions, authorized and tracked
- Metrics to track performance, SLAs, and long-term trends.



## ... Workload Automation delivers results...

#### Infrastructure





With one modified job, the market has been added to the whole price computing and distribution process, and extra nodes are ready to be provisioned for the corresponding analytics.





Report is sent immediately after data has been processed, with a **8AM SLA**.





A reminder is sent to any section that has not submitted HR reports 3 hours before deadline, and final sending is done 98% on time.



- Automated delivery of services
- Exact modification of existing workload for new businesses
- •Effortless adherence to established organization processes



# ... The system is updated automatically to reflect the change

#### Infrastructure





**E-Commerce** 

Change Management technology keeps track of what changes were made for what reason.



Actual report production is done on a dynamically provisioned system sized according to past statistics.



The flow integrates human aspects, escalation procedures and automated corporate business flows.



- Golden copy of resources linked to the systems that deliver them
- Always a clear view of what's running from a Business Support standpoint
- Optimization across the system proceeds by iterations.



## Concentrate on Value-Adding: View the Business Process step-by-step

## Several interfaces around a unique object describing the progress of delivery

## Visibility

Offer modeling for application developers, dashboards for administrators, and the personal Self-Service request list for Business Users

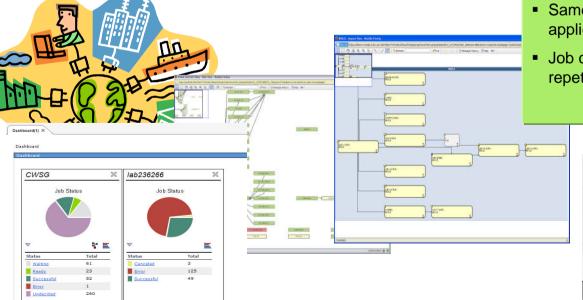
Rich Browser views, Simplified Mobile interface

#### Role-based interface for every duty

- Workload modeler, Administrators, Operators, Analysts as the main role facing the US
- Personal workload summary for business users
- All product functions available on a browser

#### Unique object model

- Immediately updated model with concurrent locking
- Same objects to reach mainframe, distributed, any application
- Job concept representing all business construct: repetition, sequencing, resource sharing

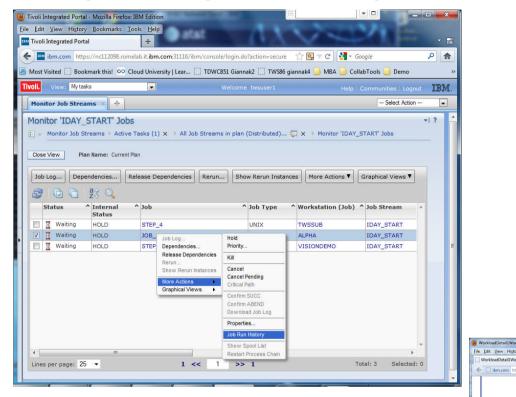






## Govern and keep control at all times

#### Map Business policies into the product with standard and shared constructs



#### **Unattended control: Policies and Reliability**

- When rules are decided, they can be enforced strictly with low effort. Service is delivered automatically and within boundaries
- Pervasive auditing to leave a track
- Automated reliability thanks to corrective actions
- Trivial collection of CPU consumption across IT

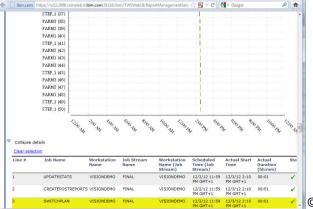
#### **Dynamic Workload Automation**

- Demand detail of infrastructure to scheduling administrator
- Ensure systematic and cheap reliability
- Report production takes place on a cloud of machines

#### **Control**

Efficiency in bringing small changes, using templates and copy-paste of processes.

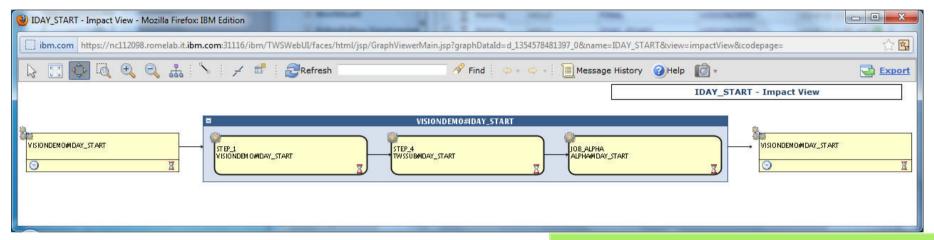






## Push the automation frontier further every day

## Automatic system updating through statistic collection and update policies



#### **Automation**

Sensitive to critical path, filled with embedded policies, Workload Automation hosts the description of autonomous business processes



Save on repetition and chart the unpredictable

#### **System statistical collection**

- Future prediction based on live statistics
- Reports delivering most impacting failures
- Return code dictionary easy to build on enterprise

#### Lower the failure rate

- Recovery actions to reach 1%, 0.5%, 0.2% of job failure without recovery
- Conditional logic to plan for special cases
- Prepare ERP jobs well with specialised panels (SAP, Oracle, Datastage, Cognos)

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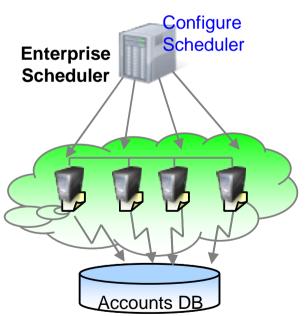


# Why IBM

# More differentiating capabilities

- Large and very active customer base
- Alignment of workload to business priorities
- Routinely take the best node in the network to accelerate execution
- Automate reaction to tense critical path
- Automate remedial actions as first reaction to risk
- Special remedial actions propagated in the cloud
- Proactive alerting of users about potential risk conditions
- Simple per-job pricing







# **TUC Additional Resources**

Please visit the Tivoli User Community to download the replay of this webcast and presentation slides and to gain access to other exclusive content – just for members!

To Login or Join: www.tivoli-ug.org

Cloud Tech Zone http://tivoli-ug.org/tech-zones/cloud-and-data-center-transformation/

Continue the discussion in our **Community Forums** where you can find questions and answers posted from today's webcast:

www.tivoli-ug.org/community-forums/default.aspx

Additional Links for members:

IBM SmartCloud Workload Automation product page:

http://www-142.ibm.com/software/products/us/en/smarworkauto

Link to whitepaper:

https://www14.software.ibm.com/webapp/iwm/web/signup.do?source=swg-101HY86W



# Go one step further

## Product home page

• http://www-01.ibm.com/software/tivoli/products/workloadautomation

## Have a look at some product demos

<a href="https://www.ibm.com/services/forms/signup.do?source=swg-spsm-tiv-bsm-dm&S">https://www.ibm.com/services/forms/signup.do?source=swg-spsm-tiv-bsm-dm&S</a> PKG=IBM-Tivoli-Workload-Automation

Tour the Best Practice and additional documentation page for a more practical feeling

• <a href="https://www.ibm.com/developerworks/mydeveloperworks/wikis/home?lang=en#/wiki/Tivoli">https://www.ibm.com/developerworks/mydeveloperworks/wikis/home?lang=en#/wiki/Tivoli</a> %20Workload%20Scheduler/page/Home

Now we have time for YOUR question!





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