



A new approach to automate provisioning and management of whole IT infrastructure on premise and in particular in the cloud

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ComodIT

Agenda

- 1) ComodIT: a complex project
- 2) EraSME partnering event @ Maastricht – 2010
- 3) Project definition & expected results
- 4) Help from NCP-Wallonie about the project
- 5) Development of the ComodIT project
- 6) Support & services provided by CETIC

Complexity of IT Infrastructure Management

Complexity

Explosion in number of application development frameworks
Increased dependencies between infrastructure components
Emergence of multi-platform (hybrid) deployments

Compliance

Documentation and auditing requirements coming from regulatory or best practices in IT management

Cost

Automate scalability to benefit from the public cloud
Accelerate application deployment while minimizing impact
Implement disaster recovery to minimize disruption impact

Many competencies required:

Provisioning

► **GUARDIS**

Configuration Management

Cloud computing

► **CETIC**

Scalable Architecture

SaaS & Security



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Comet / EraSME partnering event

@ Maastricht – January 20th 2010

Meeting with Stéphane Waha NCP-Wallonie

1st presentation of the ComodIT project

1st meeting with Pierre Villers

At that time, no real vision to set up the ComodIT project

Objectives & expected results of the project

Formalize

A standardized way to describe all requirements, methods and resources.



Requirements

The actual needs of the business owner.



Methods

The templates, actions and rules to perform key tasks

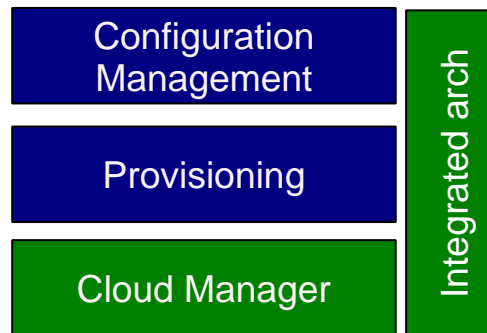


Resources

The platforms, distributions, applications and other “raw materials”

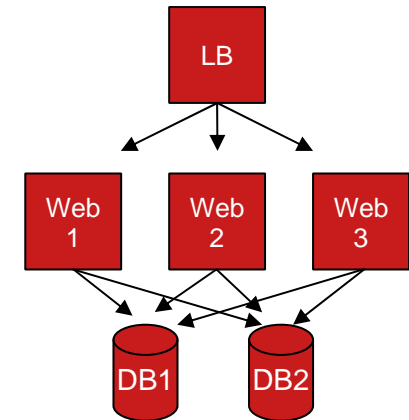
Orchestrate

A single touch-point to manage resources, provisioning & configurations.



Automate

A platform to automate the various IT processes and react to events from within the infrastructure.



Main expected results:

Integrated solution to
build & deploy infrastructure,
on-line & in the cloud

ComodIT: A powerful engine with a simple User Interface

```
{
  "description": "Simple Apache 2 setup with mod_ssl",
  "files": [
    {
      "group": "root",
      "mode": "644",
      "name": "httpd.conf",
      "owner": "root",
      "parameters": [
        "httpd_servertoken",
        "httpd_port",
        "httpd_documentroot",
        "httpd_directoryindex",
        "httpd_serversignature"
      ],
      "path": "/etc/httpd/conf/httpd.conf",
      "template": "6DE87B"
    }
  ],
  "handlers": [
    {
      "do": [
        {
          "action": "update",
          "resource": "file"
        }
      ],
      "action": "restart",
      "resource": "service"
    }
  ],
  "on": [
    "httpd_documentroot",
    "httpd_directoryindex",
    "httpd_serversignature",
    "storytlr_vhost"
  ]
}
```

The screenshot displays the Cortex Management Console interface. The main window is titled "Cortex Management Console" and shows a sidebar with navigation options: Systems, Organizations, Environments, Hosts, Resources, Applications, Distributions, Parameters, Admin, and Users. The main content area is divided into sections for "Hosts" and "Guardis/Development". A "New Host (1/4)" dialog box is open, prompting the user to select an environment and provide a name and hostname for the new host. The dialog includes fields for Organization (Guardis), Environment (Production), Name (vm-demo), Hostname (vm-demo.angleur.guardis.be), and Description. The dialog also features "Back", "Next", "Cancel", and "Finish" buttons.

Organization	Environment	Name	Hostname	Distribution	State
Guardis	Development			066A411E0B021AF537F000001	
Guardis	Development			44D811E0A83961EF7F000001	

Guardis/Development

Details Settings Ap

Organization: Guardis
Environment: Development
Host: vm-demo
UUID: B969412
Description:
Hostname: vm-demo
Distribution: 7079A58044D811E0A83961EF7F000001



Help from NCP-Wallonie

Help to the layout of the project

Find partners: CETIC

Support for the best way to fund the project

In the framework of the other projects of Guardis: first HE & Reflex-IT

Advice & reviews of the application form

IPR & other advices for the consortium agreement

Concrete test case for the ComodIT project

Many many thanks to Stéphane & Benjamin



ComodIT

Development of the project

Early March 2010, start to look for partners

Take advantage of the huge network of CETIC

Visit a few additional partners in Madrid

31st March deadline for submission

Great momentum & professionalism of the partners

4th September: results of the EraSME call

November 2010: work on the grant agreement from DGO6

1st February 2011: start of the research

April 2011: signature of the Minister



CETIC – Applied Research & Technology Transfer

- Accredited “collective” R&D centre by the Walloon Region
- Founded in 2001
- Applied Research & Technology Transfer to benefit the SMEs
- Connection between Business/Industry & Research/Academia

- **Key Figures 2010:**

- Total staff: 40 employees (>35 researchers)
- Budget: 3,900,000€

- **Serving the ICT sector**

- Contribution to innovation and Regional Economic Development
- International focus - European Research Area

- **Initiative by:**



CETIC's Research and Development

- *Software & Service Technologies*
- Helping industry to exploit faster distributed, dynamic, service-oriented architectures, Semantic Web & Future Internet opportunities
- *Software & System Engineering*
- Helping industry to improve Software & Services quality and security
- *Embedded & Communication Systems*
- Helping industry to develop « ambient intelligence » systems based on mobile / wireless technologies, Internet of Things





CETIC in European Research Area



- CoreGRID
- EverGrow
- BEinGRID
- QualOSS (C)
- HPC4U
- GridTrust (C)
- AssessGrid
- Oldes



- RESERVOIR
- Deploy
- PONTE
- Bonfire - ExSec



- EXTRA
- AMACS
- CommodIT
- DAPCARE





ComodIT

Support & Services provided by CETIC

- Broad experience in EU R&D projects (FP6, FP7, CORNET,...)
 - Proposal set-up
 - Consortium management
- Active collaboration and support to SME to set up relevant proposal in european calls like ERAsme



ComodIT

<http://comodit-project.eu>

<http://www.guardis.com>

<http://www.cetic.be>

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