



# CloudFree Creation Review

October 8, 2008

Website: <http://cloudfree.net/>  
Newsgroup: <news://news.eclipse.org/eclipse.cloudfree>

# Executive Summary



- E-commerce has become an integral part of today's ecosystem and is material to many organizations businesses.
- Organizations who seek new, competitive e-commerce processes do experience that adopting e-commerce is not as easy as download, unzip and run.
- Even software vendors are struggling with legacy platforms which are hard to maintain, extend and customize.

# Executive Summary



- Equinox Runtime provides a highly dynamic environment for building component oriented applications.
- By using Equinox and CODA we define a new platform that is designed from the beginning to gain leverage from the key advantages of Equinox and CODA - flexibility, extensibility and community.
- No focus is set on a specific feature implementation technology. The CloudFree concept will be extensible and pluggable so that it can be exchanged and adapted from a standalone server deployment to a large-scale enterprise cluster consisting of many nodes spread across different locations.

# Goals

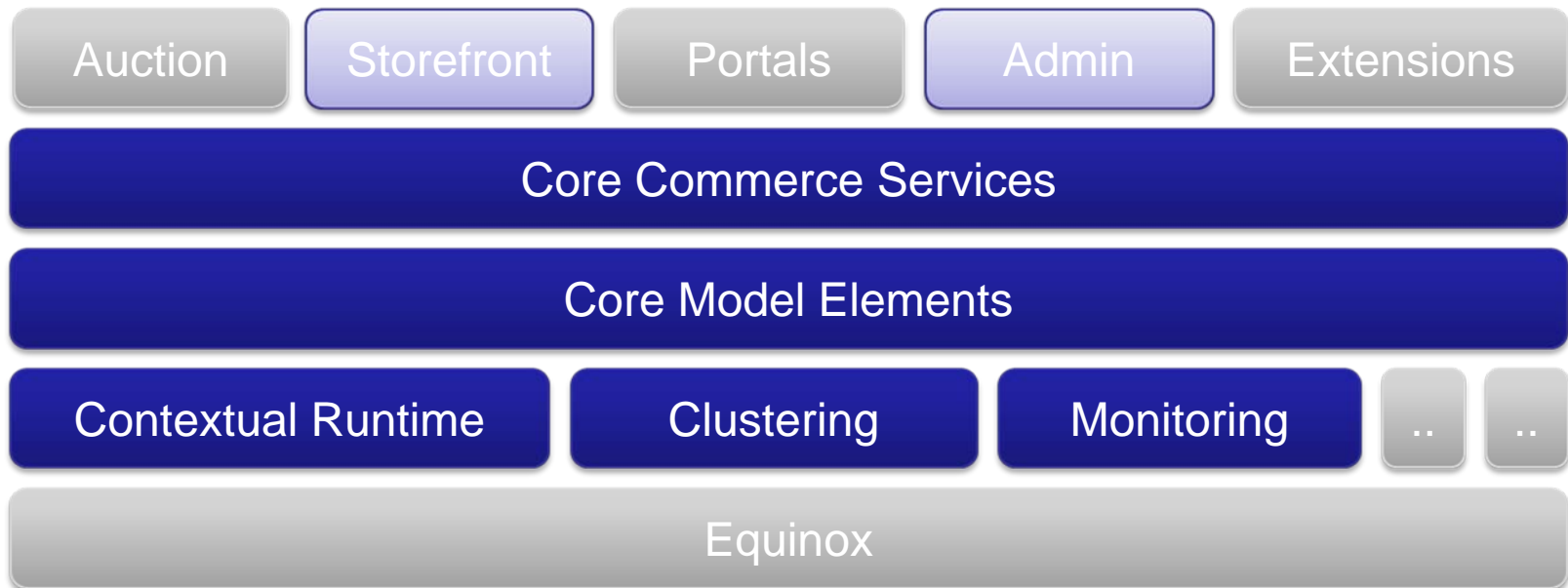


- Provide a solid platform based on Equinox which scales well and is easy to deploy, operate and extend supporting single client installations as well as large scale multi-tenant clusters.
- Define and implement a set of extensible "core" services typically required by e-commerce sites which will allow users to define, manage and retrieve products, customers and orders.
- Provide an administration interface with an appealing default UI which can be reused, customized and extended by adopters and supports web as well as desktop clients.
- Provide tools for supporting the application operation as well as define and implement a framework to allow extenders to integrate with the platform self-monitoring capabilities.

# Architecture Overview



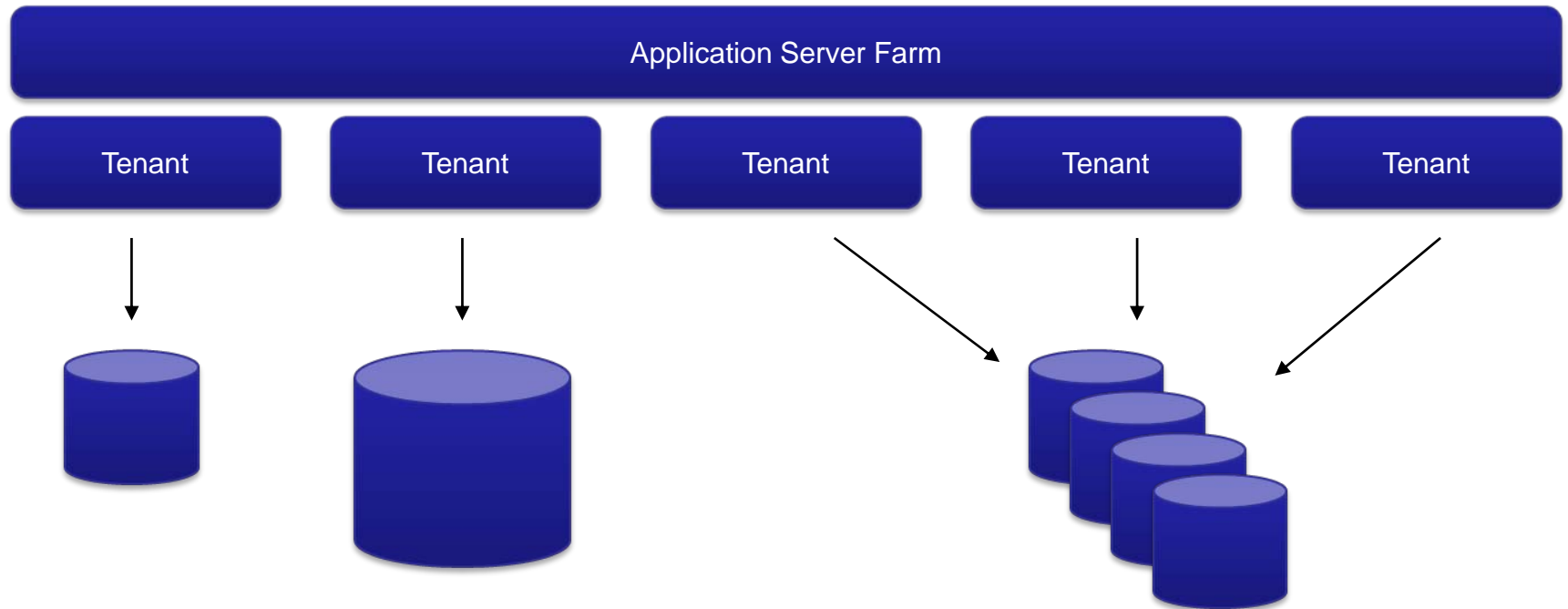
- Consistently layered architecture from ground up
- Fine grained access control through layers based on standard Equinox/OSGi capabilities



# Architecture Overview



- Multi-tenant aware scalability from ground up
- No cluster-wide downtimes anymore
- Easy administration (automate as much as possible)



# Scope



- **Inventory, Customer & Order Service** - A set of "core" services typically required by e-commerce sites. These services will allow users to define, manage and retrieve products, customers and orders.
- **Exemplary Storefront Site** - Typically, storefronts are tailored to merchant needs. They may be deeply integrated into portals and provide rich dynamic content. Therefore, only an exemplary storefront will be created which demonstrates the usage and integration with the services provided by the platform.
- **Contextual Runtime** - This is a central model for establishing a "context" for building multi-tenant applications offered as SaaS. Typically, certain aspects in a SaaS system will not be static. For example, the availability of extension X of a service may depend on a service level agreement of the tenant using that service.

# Scope



- **Clustering & Monitoring Service** - With scalability and operational simplicity in mind, the clustering service will enable multiple installations to form an application cluster and provide operators with a management interface. Monitoring will be built into the platform as an essential concept and will also provide integration and extension points.
- **Admin Service** - A central administration interface provided by the platform. The service will also provide extension points to allow extenders to integrate nicely with the platform.
- **Provisioning Tool** - A utility (based on p2) for provisioning updates and new components across installations in a cluster in an automated and controlled way.



# Out of Scope



- CloudFree will not develop any web site visitor facing e-commerce frontends except an example storefront for demonstrating how the services framework is used.
- CloudFree will not develop any vendor-specific integrations such as integrations with specific ERP or CRM systems.
- CloudFree will not develop specialized services such as a sophisticated product recommendation service.
- CloudFree will focus on a core platform and base implementations of central commerce services and provide extension points and frameworks to allow 3<sup>rd</sup> parties to build and integrate additional services and service extensions.

# Project Name and Position



- Full name: CloudFree Commerce Platform
- Short name: “CloudFree”
- CloudFree will be incubated below the Eclipse Technology Project

# Mentors



- Chris Aniszczyk
- Gunnar Wagenknecht
- (Wayne Beaton)



# Initially participating parties

- AGETO Service GmbH, Jena (Germany)
  - Project Lead, Committer
- igniti GmbH, Jena (Germany)
  - Committer
- TowerByte e.G., Jena (Germany)
  - Marketing, Community Support

# Initial Committers



- **Gunnar Wagenknecht, Project Lead (AGETO Service GmbH)**
  - Gunnar is Chief Software Architect at AGETO. He has more than 16 years experience with software development; during that time he worked as developer, architect and team manager in many projects in different areas (e.g. he developed Eclipse based tools, small to large-scale J2EE applications as well as platforms and infrastructure)
- **Ronny Schmidt (AGETO Service GmbH)**
  - Ronny is a senior software developer at AGETO. He has been working as a Java developer for the last 4 years, mostly on e-commerce web applications at AGETO or as a freelancer.
- **Ralph Spickermann (AGETO Service GmbH)**
  - Ralph is a software developer at AGETO. He joined AGETO after finishing his university diploma with excellent grade 12 months ago. He is part of AGETO's core Java infrastructure team.



# Initial Committers

- Frank Rub (igniti GmbH)
  - Frank is the founder and owner of igniti. He has more than 12 years experience with e-commerce software and worked in a lot e-commerce projects. His main expertise comes from the front-lines of e-commerce consulting for various clients.
- Christian Günzl (igniti GmbH)
  - Christian is a project manager at igniti. He has been working in the e-commerce sector for 5 years. He is also a very active community evangelist and blogger.
- Tom Gruner (ignity GmbH)
  - Tom is a 21 years old "engineering management"- student and an intern at igniti. He is a member of the igniti taskforce for CloudFree and will contribute mainly to the exemplary storefront.

# Code Contribution



- Gunnar Wagenknecht provides an initial code contribution
- No legacy code – CloudFree was completely written from scratch
- Publication under EPL
- Desired namespaces: `org.eclipse.cloudfree`

# Community Response & Interested Parties



- Community response has been positive
  - Already talking with interested clients
  - Talk at Insight E-Commerce 2008
  - Talk at ESE 2008
  
- Interested parties
  - TowerByte e.G., Jena (Germany)  
(consortium of 28 companies with a strong focus on “e-commerce”)
  
  - PlanetEye Inc., Toronto (Canada)  
(role user & contributor)
  
  - Weigle Wilczek GmbH, Esslingen (Germany)  
(extender & contributor; Heiko Seeberger, Technical Director)



# Relationships to other Eclipse projects



- CloudFree is based on Equinox
- Technologies from the following projects may be used as well:
  - RCP
  - RAP
  - ECF
  - EMF
  - Higgins
  - OHF
  - OFMP

# Tentative Plan



- ESE-2008 Version 0.1
  - A first prototype with an exemplary storefront which demonstrates the product service and helps to spread the CloudFree vision.
- Q3/2009 Version 0.7
  - Feature complete
  - Core services for creating/updating/retrieving products, customers and orders
  - Admin interface for managing products, customers and orders
- Q1/2009 Version 1.0
  - Committed API complete
  - Provisioning tool, self-monitoring and operational assistance tooling

# Contact & Resources



- Newsgroup preferred
  - <news://news.eclipse.org/eclipse.cloudfree>
  - for comments, questions, and for request that the review call be held
  
- Watch website
  - <http://cloudfree.net/>
  - for blogs, articles and screencasts
  
- Wiki
  - <http://wiki.eclipse.org/CloudFree>
  - for documentation and planning