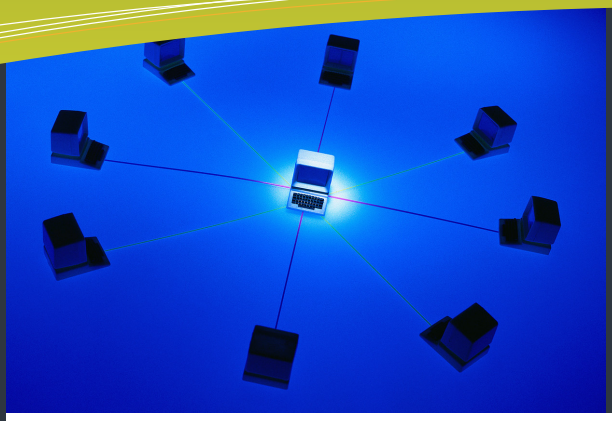
NEXT GENERATION *.NET* GRID / CLOUD COMPUTING COMPANY

Manjrasoft Pty Ltd



ANEKA

Next Generation Enterprise *.Net* Grid & Cloud Computing Platform

ENTERPRISE GRID

Enterprise Grid computing is an integrated collection of networked resources, services, and applications, which are parts of a single, cohesive resource sharing environment. The scope of an enterprise grid could range from a small departmental network to a vast collection of resources and services running in multiple locations.

ENTERPRISE CLOUD

An enterprise Cloud is a type of computing infrastructure that consists of a collection of inter-connected computing nodes, virtual machines, and software services that are dynamically provisioned among the competing applications based on their availability, performance, capability, and Quality of Service (QoS) requirements.

Contents

Introducing Manjrasoft Pty Ltd

Manjrasoft Pty Ltd is a start-up business spun out of The University of Melbourne to commercialise a range of Next Generation .NET-based Grid / Cloud Computing technologies developed within the University's Department of Computer Science and Software Engineering (GRIDS Lab). The first of these technologies being commercialised is a .NET-based enterprise Grid/Cloud Computing Platform called "***ANEKA***"

ANEKA is a patented (PCT pending) Grid / Cloud computing technology. It has been developed over many years by a number of talented academics and researchers within the University of Melbourne, led by A/Professor Rajkumar Buyya. This research is supported by the Department of Innovation, Industry, Science & Research (DIISR). It has its roots in open source Gridbus technologies also arising from Dr. Buyya and his team's research since 2002.

ANEKA is now available as a full fledged product and a free evaluation version is available for download. Manjrasoft is looking for interested parties to evaluate the product prior to its full commercial release. You can download ***ANEKA*** from http://www.manjrasoft.com/

Manjrasoft Pty Ltd is backed by the inventors of the ANEKA platform and the University of Melbourne. It has recently secured funding from an Australian Government initiative called "COMET" (Commercialising Emerging Technologies). This initial funding has assisted in the development of business plan and technology commercialisation.

Manjrasoft is seeking interested parties to;

1. Build applications using Aneka (ISVs)
2. Make use of Aneka for speeding up execution of applications (end users).
3. Build Commercial relationships and joint Go-To-Markets.
4. Discuss investment and business opportunities.

Plesae contact Dr. Raj Buyya – CEO Manjrasoft at raj@manjrasoft.com to discuss how you would like to work with Manjrasoft in the near future.

Visit our site at http://www.manjrasoft.com to get more information about Manjrasoft and our Next Generation .NET Grid / Cloud computing technologies and products.

Meet the CEO

Dr. Rajkumar Buyya
CEO – Manjrasoft Pty Ltd
A/Professor – University of Melbourne, Australia

Dr Buyya is:

**Globally recognised as a thought leader in Utility and Distributed Computing.*

** **Published** >230 high quality and high impact research papers*

**Received over $42 million research grants.*

Over **15 years experience in researching, designing and developing high-performance distributed computing systems.*

** Received the **2009 IEEE Medal for Excellence in Scalable Computing**, IEEE Computer Society TCSC, USA.*

Introducing the *ANEKA* PLATFORM

ANEKA – the first choice for flexible, extensible .Net Grid / Cloud application development and deployment.

ANEKA was conceived with the aim of providing a set of services that make grid / cloud construction and development of applications as easy as possible without sacrificing flexibility, scalability, reliability and extensibility.

The key features supported by ***ANEKA*** are:

- A configurable container enabling pluggable services, persistence solutions, security implementations, and communication protocols;
- multiple programming models including object oriented thread model (fine grained abstraction), file-based task model (coarse-grained abstraction) for grid-enabling legacy applications and Map Reduce model for coarse-grained data intensive applications;
- multiple authentication / authorisation mechanisms such as role-based security and Windows domain-based authentication;
- multiple persistence options including RDBMS, SQL Express, MySQL and flat files;

ANEKA is specifically designed to work with the popular Microsoft .NET environment, and provides a choice of programming models to ensure that your applications can gain all of the benefits that grid computing has to offer.

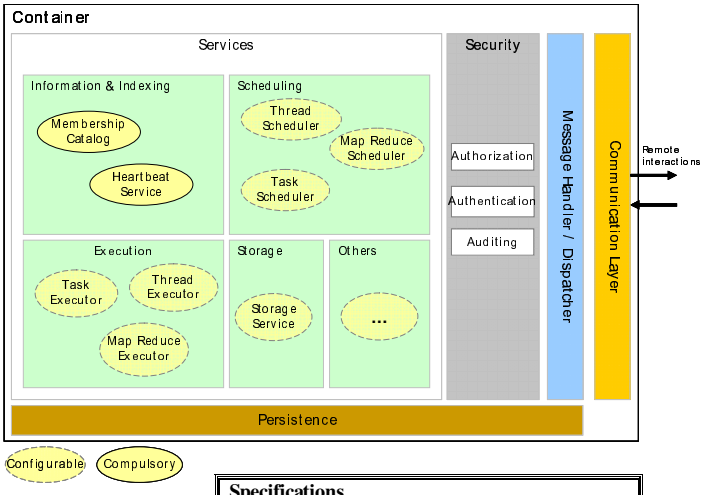
Grid computing allows commoditised hardware (servers and desktop PCs) to be linked together to form a very powerful computing infrastructure.

This capability allows companies to become energy efficient and save money without having to invest in greater numbers of servers or mainframes to run their complex business software applications.

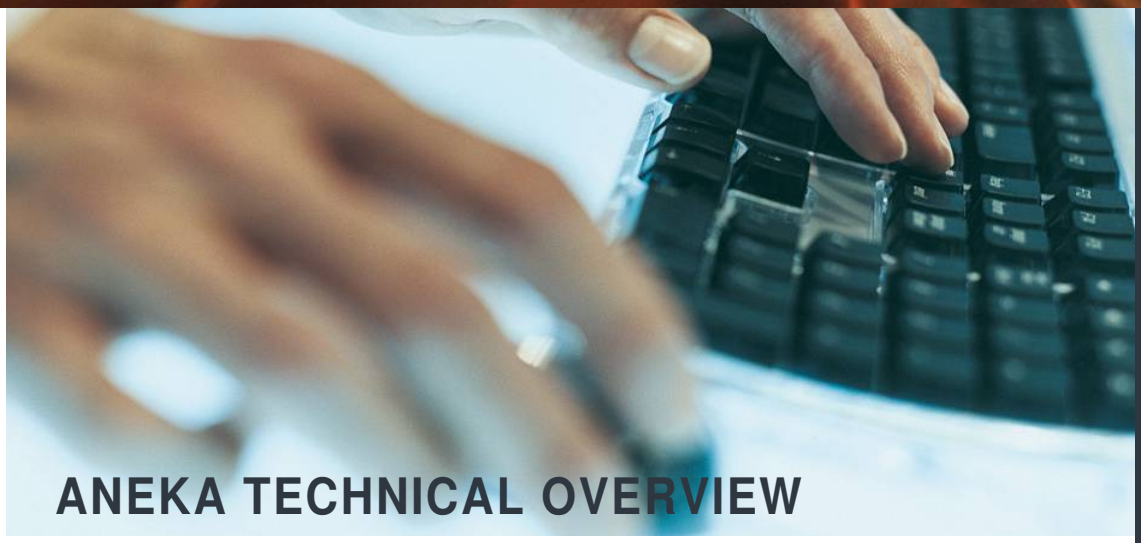
Additionally, grid-enabling a time critical application allows faster processing, which can facilitate improved decision making and improved services to customers.

ANEKA

Your choice for Enterprise .NET Grid / Cloud Solutions



Specifications
Microsoft Windows / Vista (XP Pro SP3, Business)
Microsoft Windows Server 2003 / 2008
Microsoft .NET Framework (>.2.0)



ANEKA TECHNICAL OVERVIEW

Model choice

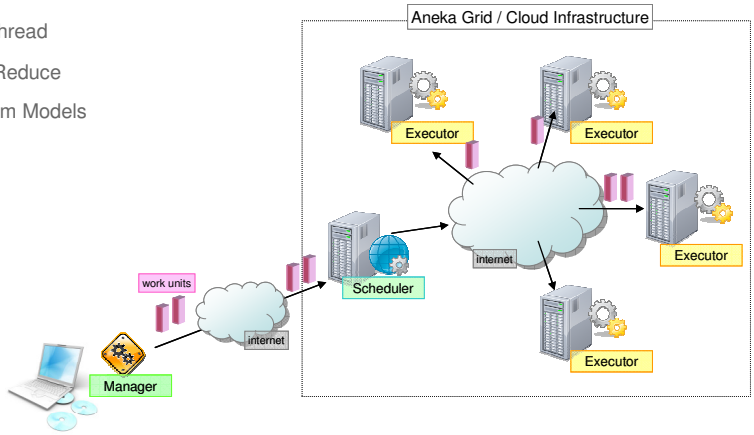
ANEKA offers four programming models which are closely aligned to many business and scientfic applications, and also offers the unique ability to add more models as required.

Chose from:

- Grid task
- Grid thread
- Map Reduce
- Custom Models

ANEKA is built on a decentralised architecture. Each ***ANEKA*** node consists of an instance of a configurable container which hosts compulsory and configurable services. These services include information & indexing, scheduling, execution and storage services. ***ANEKA*** can support multiple programming models, security, persistence and communications protocols.

ANEKA provides a flexibile and extensible environment which can run multiple applications simultaneously and support complex models and dependencies within those applications.



Enterprise Cloud/Grid Technology Tips

Q: Many of the grid products only support Linux – what can I use on my Microsoft based systems ?

A: ANEKA is the first .NET-based enterpirse grid/cloud computing platform that supports multiple programming models. With most corporates using Windows-based PCs as desktops, a .NET-based solutions enables you to seamlessly integrate your desktops with enterprise grid/cloud systems.

If you are looking to develop new .NET distributed computing applications or cloud/grid enable your legacy .NET applications, ANEKA is the product for you. Using ANEKA's DesignExplorer, a corporate developer, a software vendor or a services provider can quickly turn legacy applications into cloud/grid applications. This build and deploy model allows the user to take advantage of the scalable and reliable grid / cloud computing environment provided by ANEKA.

EYE ON IT

Current Industry Trends

"The clouds are gathering"
Over the past 12 months nearly every major technology vendor, industry player and academic institutions have all signalled or released a cloud computing offering . At Manjrasoft we believe that most large corporate, ISVs and Services providers require both reliable and scalable technologies to be deployed in a cloud environment. ***ANEKA*** is a product that meets this need – Try it and See!

"Everyone is talking Clouds"
Who isn't talking cloud? The hype around cloud computing is growing every day. Will this paradigm truly offer the freedom that most large IT infrastructure users require or is it wish of future things to come? At Manjrasoft, we believe that cloud computing is here to stay but many customer will build internal or enterprise clouds first to provide a high level of services to their own users.

Trial Technical Support (e-mail)

Manjrasoft will provide web support for all trial customers, partners and developers during the alpha phase of ***ANEKA*** release cycle. Web support will provide a community of feedback both for Manjrasoft and early stage users of ***ANEKA***. Make sure you register for web support when you download ANEKA

ANEKA SOFTWARE

Trial Licenses Available

Download trial licenses at our website to get a free version until June 30, 2009. Be one of the first developers to register for this download and become a foundation member of Manjrasoft user community. Join us in this exciting journey to create the next computing paradigm and applications.

ANEKA 1.0 – Get a Free Evaluation Version Now

- **Go to http:// www.manjrasoft.com**

  Visit our site and read about Manjrasoft. You can download a range of information including Academic Whitepapers and Case Studies. Contact us for more informaiton.

- **Register as a foundation *ANEKA* Developer**

  To get access to a free evaluation version of ANEKA 1.0, you need to first register as an ANEKA developer. This is a free service that will allow you to communicate with our development team regarding how you are using ANEKA and share your experiences with a broader developer community.

- **Download *ANEKA***

  Once you have registered as an ANEKA developer, then download ANEKA to your desktop. Follow the instructions and start developing.

- **Start Developing**

  When you download ANEKA we provide user documentation and sample code to help you begin your development. Use our technical support forum to ask for assistance or hints with your development.

Note: This evaluation version is valid until June 30, 2009. Those interested in perpetual license with support, please contact Manjrasoft for pricing details.

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ANEKA – GET IT

Recommended Uses

Grid Thread

An application as a collection of one or more independent threads. A thread model fits better for architecting and implementing new applications, algorithms on clouds as this models gives finer degree of control and flexibility.

Grid Task

An application as a collection of one or more tasks, where each task represents an independent unit of execution. This model is more suitable for grid/cloud enabling the legacy applications.

Map Reduce

This model is designed to model the MapReduce concept (promoted most recently by Google) and applicable to processing of large data intensive applications. A MapReduce application is executed in a parallel manner through two phases.

Custom

Develop an application which uses one or all of these models or create a new model with ANEKA.

Manjrasoft grid / cloud experts can assist with your application development. Contact Manjrasoft to discuss your requirements.