Contents

1. INTRODUCTION

1.1 Purpose

Purposes of this document are:

- To identify the components/deliverables that will be issued for Manjrasoft's Aneka 5.0 major release.
- To identify the Hardware and Software requirements for the installation.
- To describe the Installation Setup procedure.

1.2 Scope

Applicable to Manjrasoft Aneka Release 5.0:
- Customer:

1.3 References

Manjrasoft Aneka Release 5.0 Documentation.

1.4 Abbreviations and Acronyms

(none)

1.5 Approvals and Authorisations

	Designation	Name	Date
Author	CEO	Rajkumar Buyya	
Approved by			
Authorized by			

1.6 Amendment Record

No	Release Date	Document Issue Date	Section(s)	Release No.	Document Issue No.	Description

2. CONTENT OF THE RELEASE KIT

S. No.	Software item / Documents	Issue/ Version Number	Number of copies	Media	File Size	Date and Time
1	Aneka Installer	5.0	1	Software Download	75 MB	
2	Aneka Example Applications					
3	Aneka Design Explorer		Included in Aneka 5.0 MSI			
4	Tutorial Series for Programming Model (Task, Thread and Map Reduce)					
5	Aneka Documentation					

3. INSTALLATION PROCEDURE

Aneka 5.0 is distributed into a Windows Microsoft Installer package (Aneka.5.0.msi). Once you get the copy of the package simply click on it and start the installation. You have to be Windows Power User to properly configure and install the Aneka Container. For detailed instructions, please refer to the Aneka Installation Guide.

3.1 Hardware and Software Requirements

This section provides information to help you understand the bare minimum infrastructure need to run Aneka cloud application platform.

S. No.	Particulars	Requirements For	Recommended Requirements	Remarks
Hardware Requirement				
1.	CPU Requirement	Aneka Master	1-gigahertz (GHz) or faster processor recommended.	
2.	Memory	Aneka Master	1 gigabyte (GB) or more recommended	

S. No.	Particulars	Requirements For	Recommended Requirements	Remarks
3.	Minimum Disc Space for setup	Aneka Master	1 GB	
4.	Network Interface Card	Aneka Master	For optimal performance, a minimum 1GB NIC is recommended.	

S. No.	Particulars	Requirements For	Recommended Requirements	Remarks
Hardware Requirement				
5.	CPU Requirement	Aneka Worker	Computing Resource with 300 megahertz or higher processor clock speed	
6.	Memory	Aneka Worker	The Aneka Worker setup requires 15 megabytes (MB) or more recommended based on the application deployed.	
7.	Minimum Disc Space for setup	Aneka Worker	The Aneka Worker setup only requires 10 megabytes (MB) 100 Megabytes (MB) or more recommended based on the application deployed.	
8.	Network Interface Card	Aneka Worker	For optimal performance, a minimum 1GB NIC is recommended.	

S. No.	Particulars	Requirements For	Recommended Requirements	Remarks
Software Requirement				
1.	Operating System	Aneka Master	Microsoft Windows Operating System (including Windows 7, Windows 8, Windows 8.1, windows 10, Windows Server 2008, Windows Server 2012)	
2.	Database	Aneka Master	Microsoft SOL Server/SQL Server Express 2005 version 9 or higher/ MySQL 5.1.30 or higher (optional, if database support is required)	
3.	Development Framework	Aneka Master	Microsoft .NET framework 4.5 or higher	

S. No.	Particulars	Requirements For	Recommended Requirements	Remarks
Software Requirement				
4.	Operating System	Aneka Worker	Microsoft Windows Operating System (including Windows 7, Windows 8, Windows 8.1, windows 10, Windows Server 2008, Windows Server 2012)	
5.	Development Framework	Aneka Worker	Microsoft .NET framework 4.5 or higher	

3.2 Installation Setup Procedure

The following steps to be followed for setting up/installing Manjrasoft Aneka Release 5.0 with the above mentioned hardware and software:

- Copy the step-up kit from Internet Download / CD on to the HDD.

- Click on the MSI package to start the installation.

- And follow the "Aneka Installation Guide" for configuring Aneka nodes.

3.3 Functional Enhancements

The following are the new functional enhancements to this release:

3.3.1 .NET Framework

Aneka 5.0 has been updated to latest .net 4.5 version to make complete benefit of new API's.

3.3.2 Application Catalogue Service

Implemented Platform independent management protocol.

Central software repository for software installation and update.

Implemented Node gateway to control the node services.

3.3.3 Reservation Integration

Integrated Reservation services into Aneka codebase.

Integrated the existing Allocation services into Aneka codebase.

3.3.4 Enterprise QoS

Added Deadline based Scheduling Algorithm.

Added Data Aware Scheduling Algorithm.

Added User Modules into Design Explorer enabling selection of QoS.

3.3.5 Cloud Deployment

Full support for Amazon EC2 (static deployment and dynamic deployment).

Full support for Openstack (static deployment and dynamic deployment).

Full support for Xen Virtualization.

Static deployment via Xen VM: Dynamic deployment via Xen API.

Full support for GoGrid (static deployment and dynamic deployment).

Full support of Azure classic portal.

Full support of Azure Resource Manager portal.

3.3.6 Logging Service

Added logging service that manage the log information in each node.

Added logging management GUI to view the log information.
Added more logs for better reporting.

3.3.7 Dynamic Resource Provisioning Scheduling

Added intelligent algorithm to dynamic provisioning service to auto scale the resources based on QoS.

3.3.8 Reporting Service

Provided service capability to report its own properties to the Aneka container.

Implemented the Reporting service that handles queries related to various reporting activities including billing, metering, and usage.

Enhanced GUI to provide statistics for various reporting activities.

Configuration Utilities: Implemented customizable configuration facilities that will be used when configuring various Aneka services.

3.3.9 Numerous Enhancements to Stability and User Interface

A number of enhancements to stability and user interface including bug fixes.