

ME Cluster™ – Remote Distribution Server

“Information Guide”



March 2005 Edition
Part Number 03202005-01



Worldwide Technical Support and Product Information

www.manualends.com

For further support information, see the *Technical Support Resources* appendix.
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1 What is ME ClusterTM ?

What Is Cluster Computer System? Supercomputers that are single big expensive machines with a shared memory and one or more processors meet the professional need. Therefore, a large-scale processing and storage system that provides high bandwidth at low cost is then their expectation. Now, a cluster computer system is a collection of independent and low cost person computers, connected together via a high speed network and configured to precede a single program to provide the solution. This computing configuration has proven very successful at solving extremely large problems at affordable prices. It is especially popular within the data analysis, research, and high energy physics.

Figure 1.1 Computer systems in the pass.

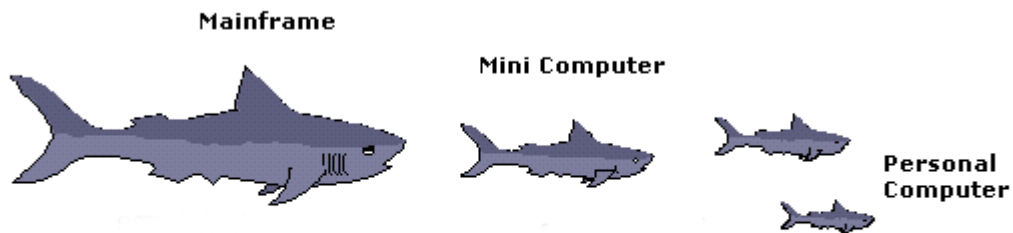
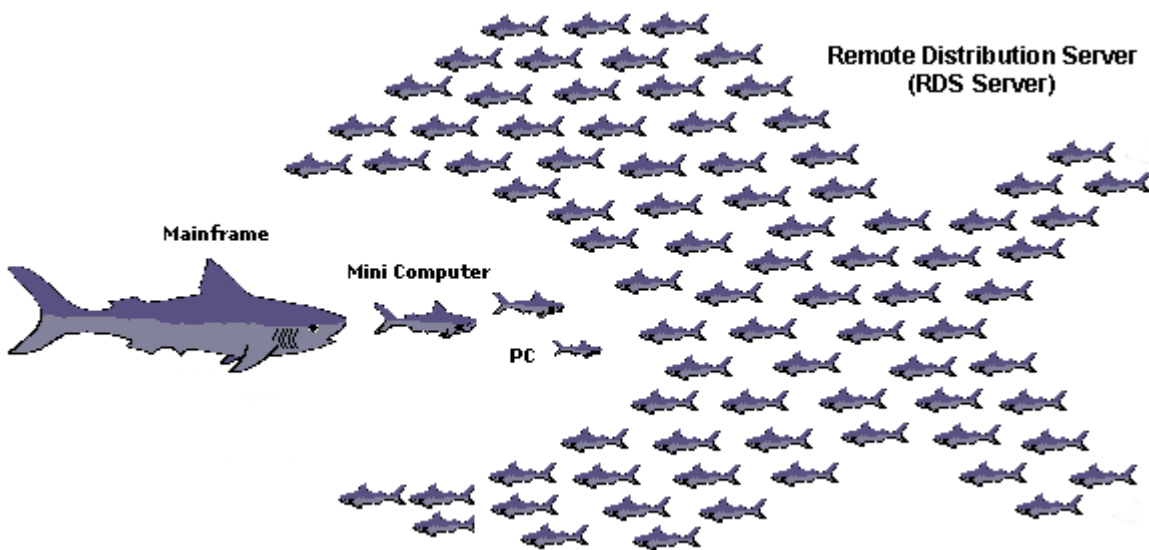


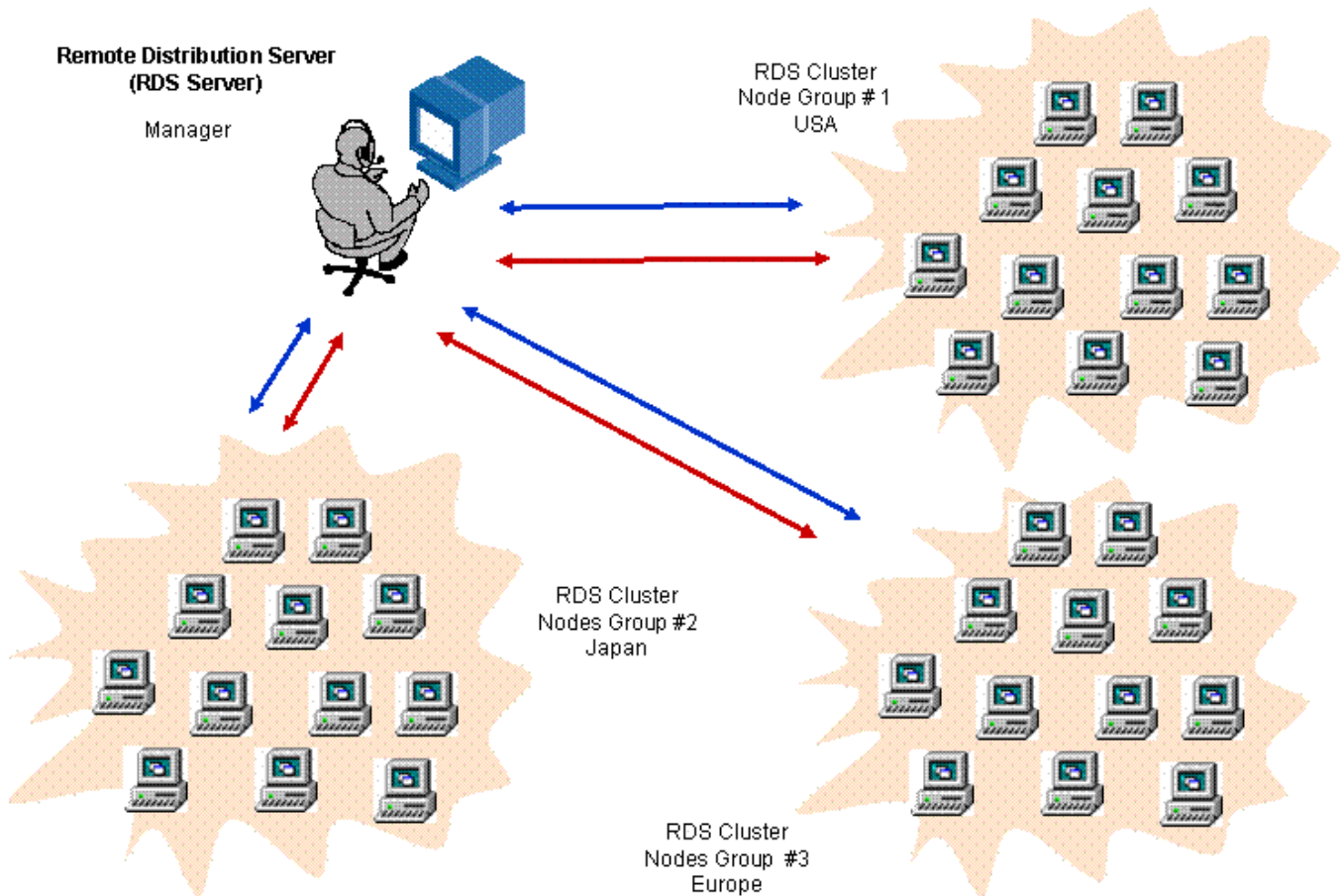
Figure 1.2 ManualEnds Cluster Solution at present.



Why Use Remote Distribution Server?

ME Cluster – Remote Distribution Server is made to use the power of cluster computing, a technology that involves connecting many computers together to work as one team on a single process. ME Cluster – Remote Distribution Server provide a solution to execute a large number of script commands over a large number of computers at high-speed network or Internet. Files and script commands can be distributed over any TCP/IP based network, whether on the local area network or across the Internet. Powerful software tool for Enables Grid Computing, ME Cluster – Remote Distribution Server could be executed on grid machines in various locations worldwide.

Figure 1.3 ME Cluster - Remote Distribution Server Group.



Many applications are suited to run on large computing clusters, for example, a 20-hour task can be computed in one hour on twenty computers. A one-month task can be computed in a day on 50 computers. Moreover, a one-year task can be computed over a day on 200 computers. It will depend on the number of PC Nodes of your connected RDS Cluster PC team.

Figure 1.4 Application of ME Cluster - Remote Distribution Server.

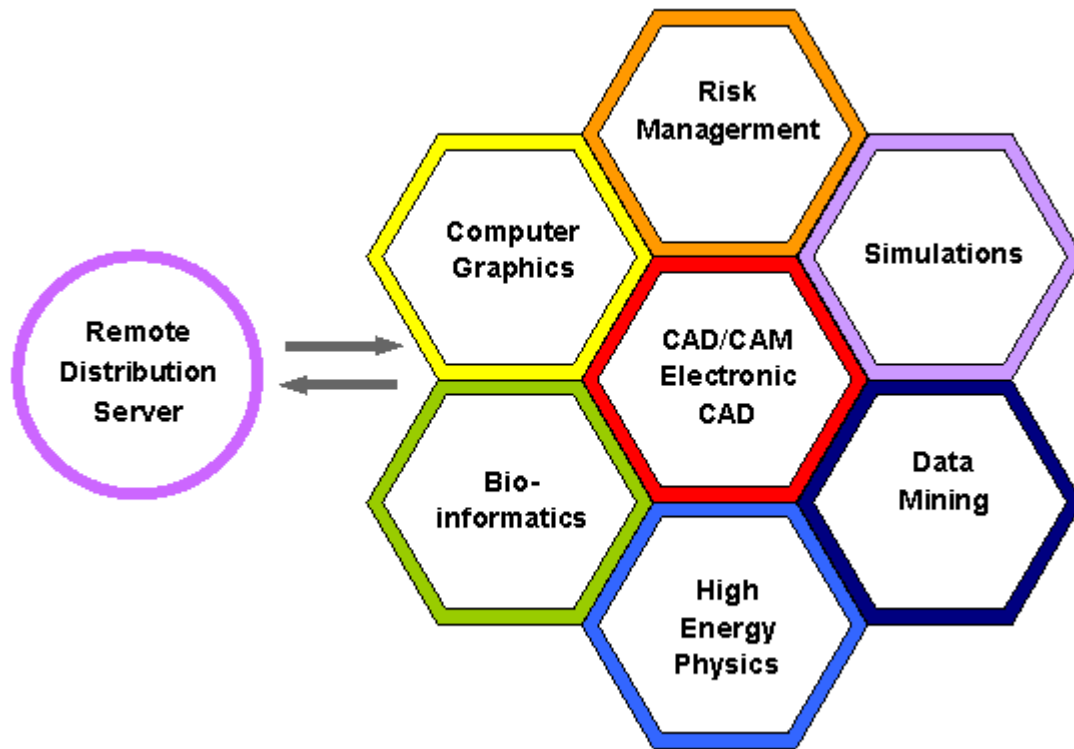
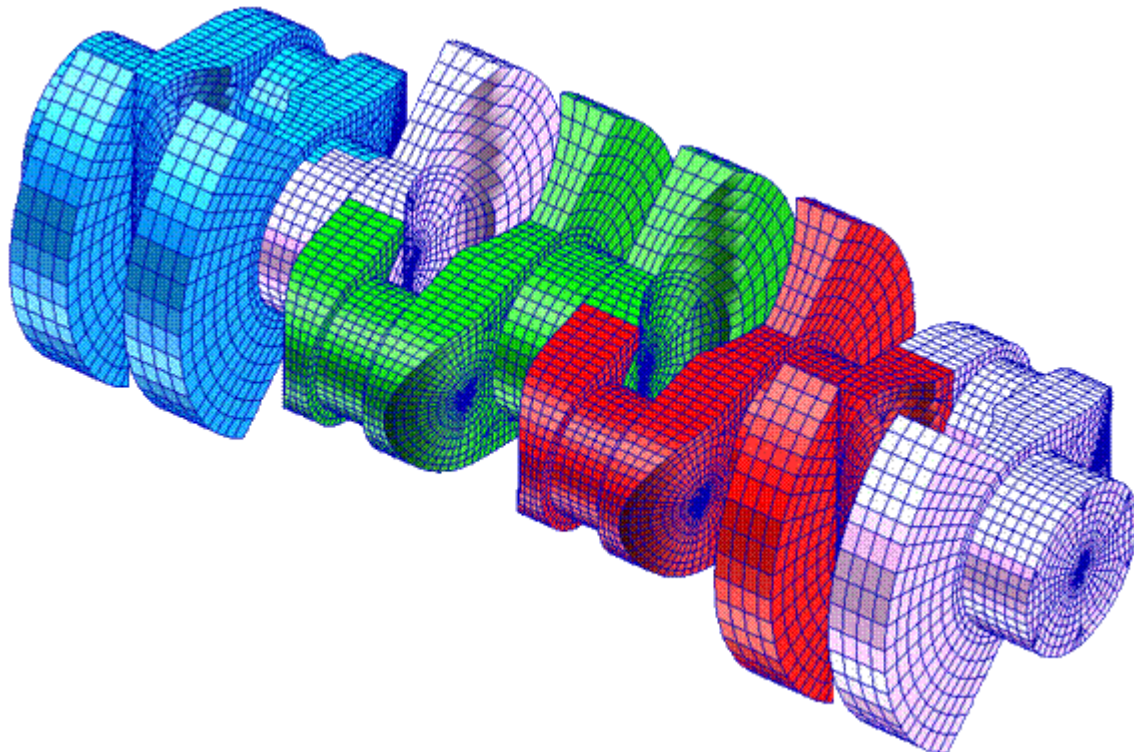
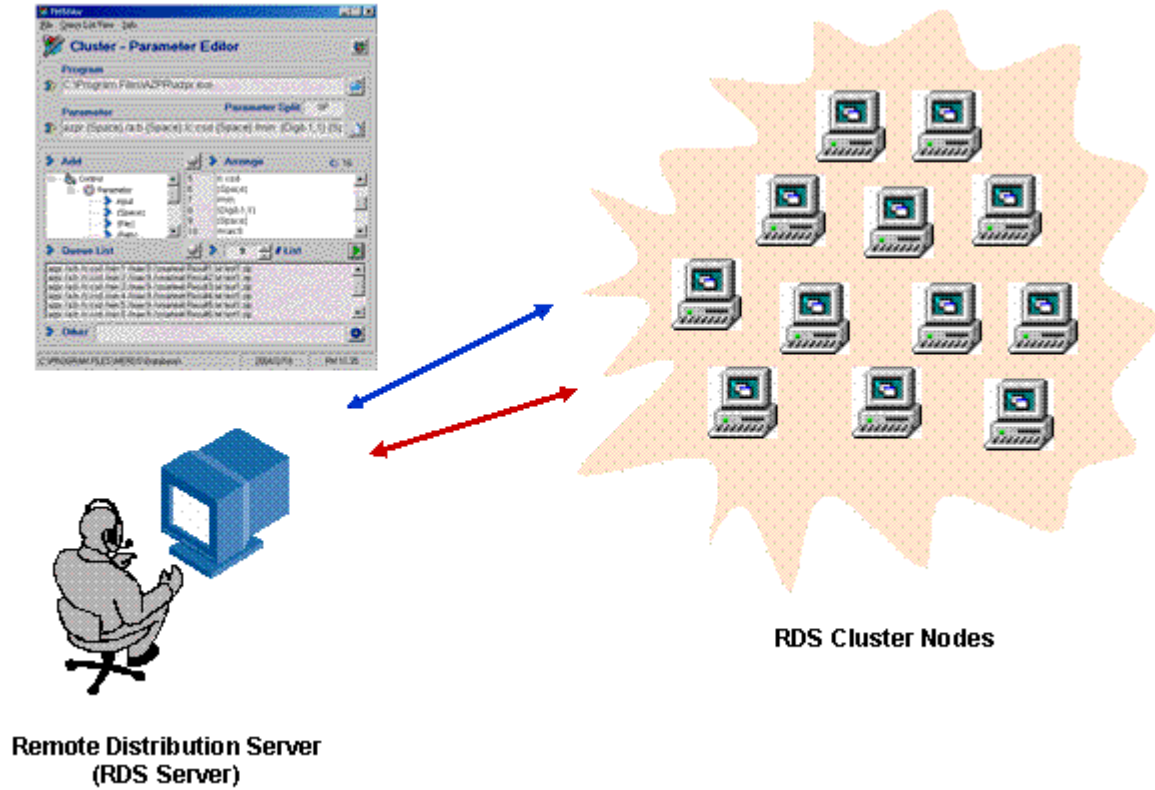


Figure 1.5 Data Result of ME Cluster - Remote Distribution Server for CAD/CAM.



. Design of script commands, the same application can be executed repeatedly, each time with different input parameters and return different output results. ME Cluster – Remote Distribution Server also includes the Parameter Editor software, which provides for a simple creation of script command files.

Figure 1.6 Parameter Transfer of ME Cluster - Remote Distribution Server.



ME Cluster – Remote Distribution Server provides an extremely flexible, expressive framework for matchmaking resource requests with resource offers. You could combine your current cluster node’s setting (MPI, PVM) with ME Cluster – Remote Distribution Server’s Group.

ME Cluster – Remote Distribution Server reduces the total cost of network management in the environment and is the effective remote control solution for everyone’s networks.

Figure 1.7 Flexibility of ME Cluster - Remote Distribution Server.

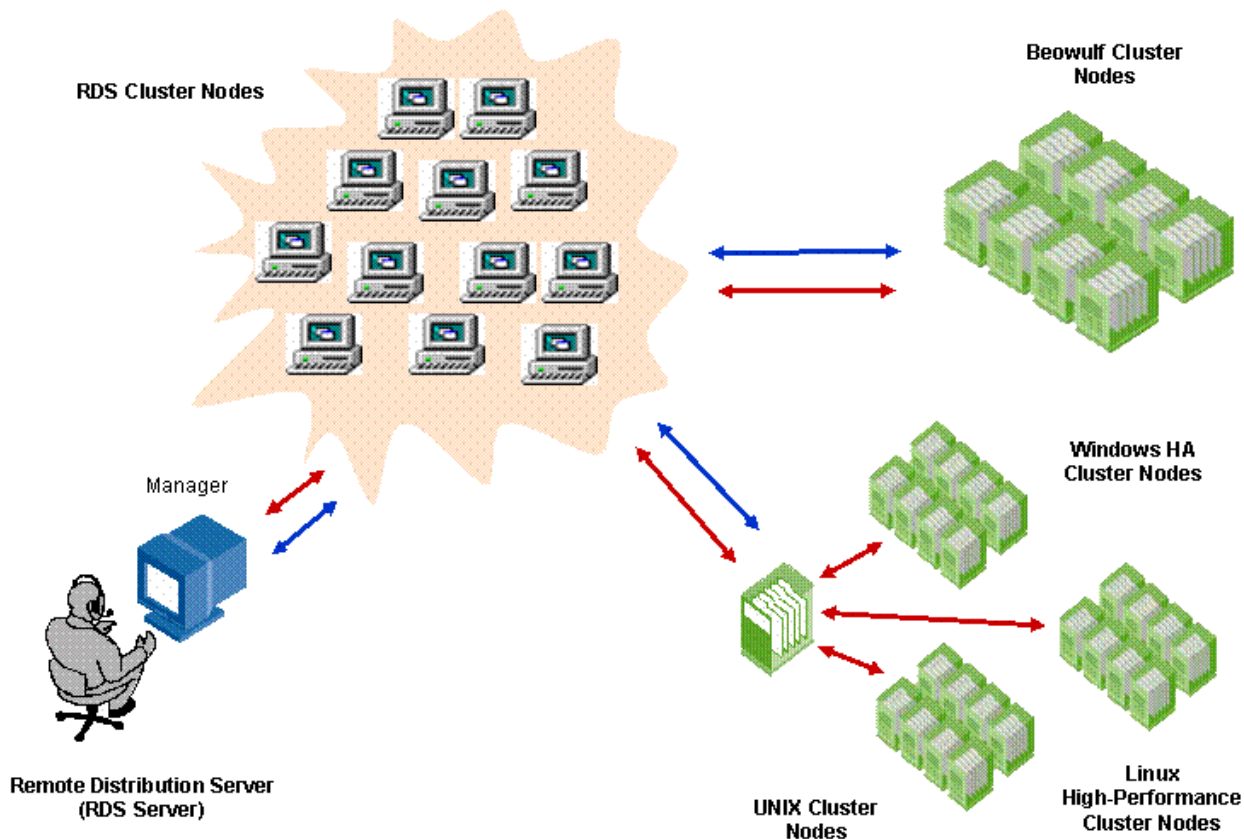
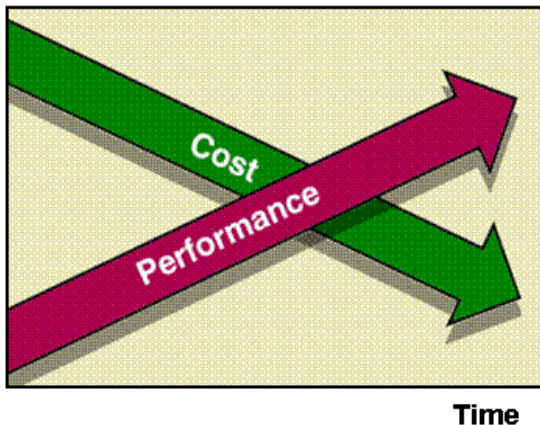


Figure 1.8 Cost and Performance of ME Cluster - Remote Distribution Server.

Cost & Performance



System Performance

- Autoimmunization**
- Productivity**
- Flexibility**
- Configurability**

System Cost

- Purchase price**
- Development cost**
- Maintenance cost**

Structure of ME Cluster – Remote Distribution Server

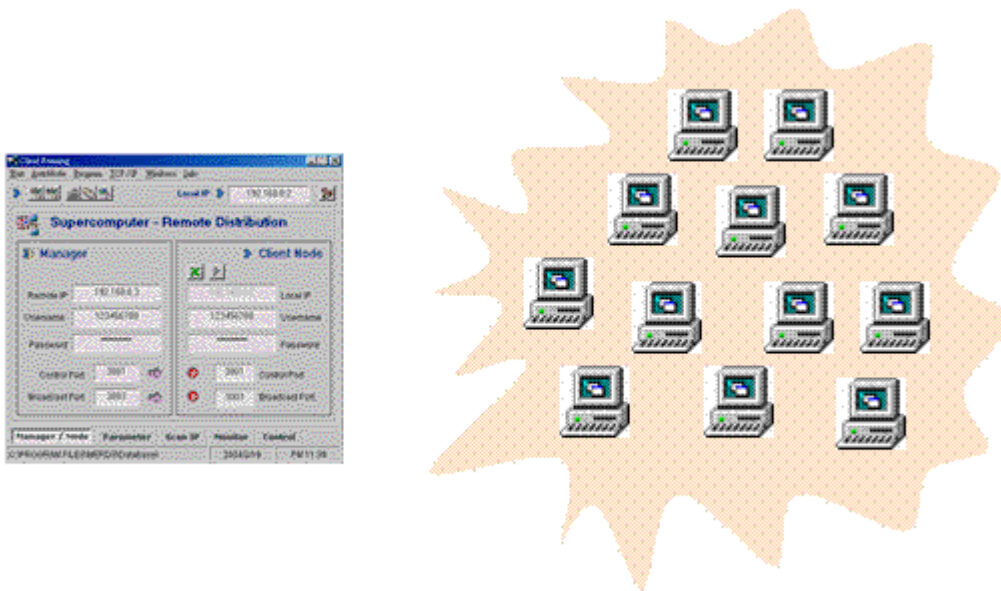
(with Virtual Keyboard, Virtual Desktop control)

ME Cluster – Remote Distribution Server is a single program and could be set as Local Manager or Local Client Node. To distribute script command to computers remotely, you must install **ME Cluster – Remote Distribution Server** on all computers, the **Remote Distribution Server Manager** computer and the **Remote Distribution Server Client Node** computers.

Client Node:

When the remote client node connects to the network, **Remote Distribution Server Client Node** will standby and look at the request connection to find an active **Remote Distribution Server Manager** for respond.

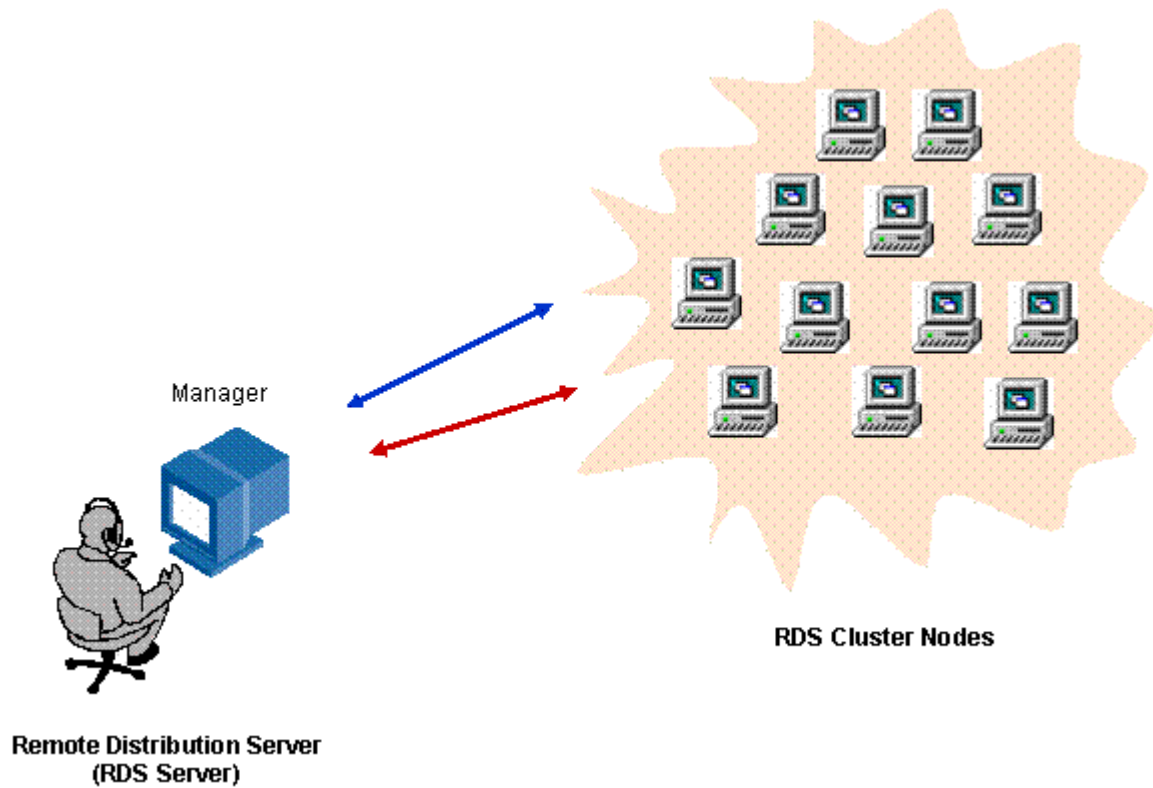
Figure 1.9 Remote Distribution Server – Client Node



Manager:

Remote Distribution Server Manager allows you to scan, forward remote commands, upload, / download files, or broadcast messages/actions to the **Remote Distribution Server Clients Node**.

Figure 1.10 ME Cluster – Remote Distribution Server Manager & Client Node.



Output Monitor:

ME Cluster – Remote Distribution Server finds an available PC node on the network and begins running the parameter script job on that PC node. **ME Cluster – Remote Distribution Server** has the capability to detect that a PC node running a parameter script job is no longer available. It can checkpoint the job and move the jobs to a different PC node that would otherwise be idle. **ME Cluster – Remote Distribution Server** continues job on the new PC node from precisely where it left off. **ME Cluster – Remote Distribution Server** makes it easy to maximize the number of PC node that can run a job.

Figure 1.12 Remote Distribution Server – Output Monitor

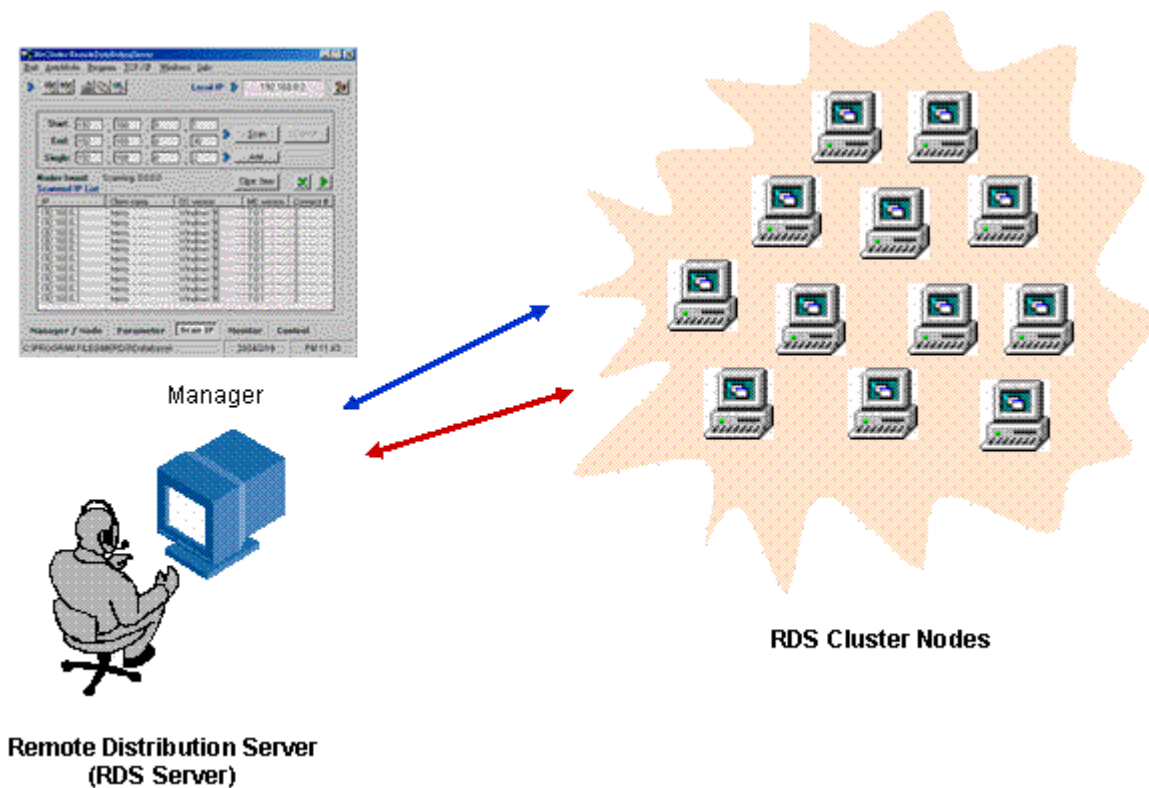


Figure 1.13 Remote Distribution Server – Data Results for CAD/CAM

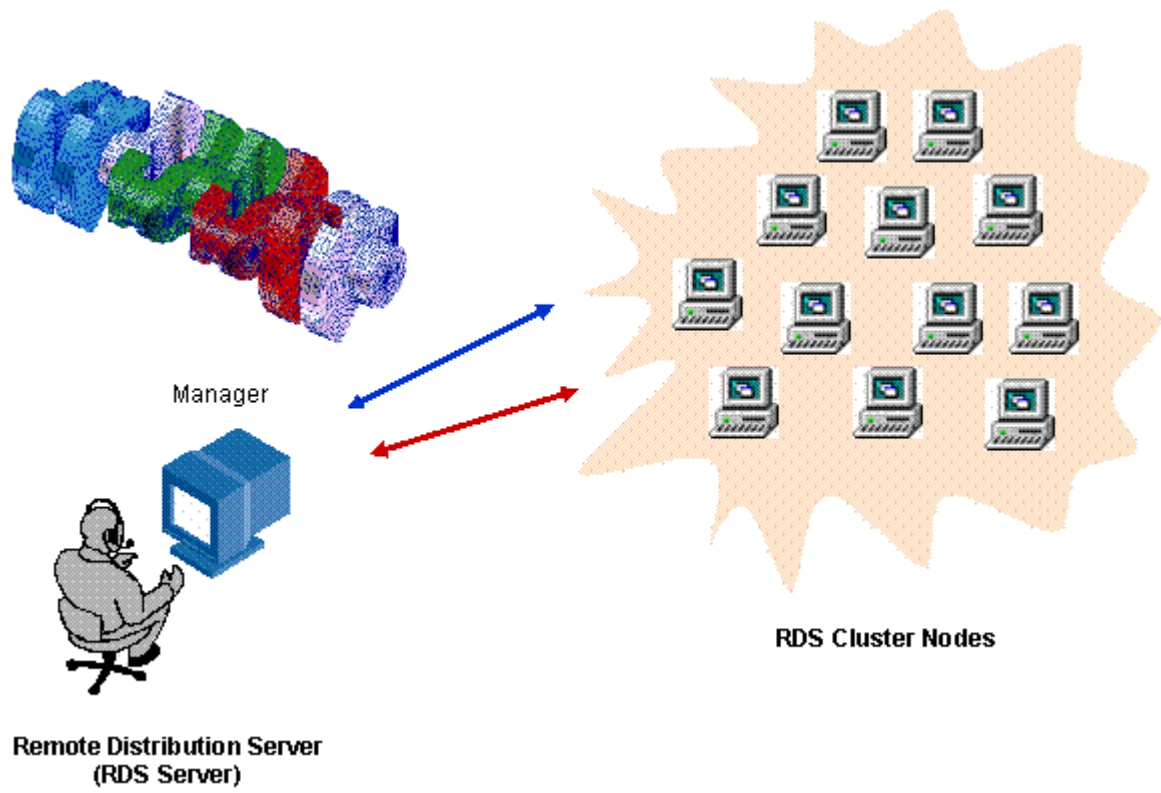


Figure 1.14 Web browser monitor result.

Address <C:\Program Files\MERDS\MEOutput.htm> Go Links >>

c:\Program Files\MERDS\Output\ *.*
Created DateTime: 7/21/2004 11:15:52 PM

File Name	File Date & Size
c:\Program Files\MERDS\Output\192168000003\RESULT1.TXT	7/21/2004 11:14:58 PM 1 KB
c:\Program Files\MERDS\Output\192168000004\Result2.txt	7/21/2004 11:15:04 PM 1 KB
c:\Program Files\MERDS\Output\192168000005\Result3.txt	7/21/2004 11:15:12 PM 1 KB
c:\Program Files\MERDS\Output\192168000006\Result4.txt	7/21/2004 11:15:20 PM 1 KB
c:\Program Files\MERDS\Output\192168000007\Result5.txt	7/21/2004 11:15:28 PM 1 KB
c:\Program Files\MERDS\Output\192168000008\Result6.txt	7/21/2004 11:15:33 PM 1 KB
c:\Program Files\MERDS\Output\192168000009\Result7.txt	7/21/2004 11:15:39 PM 1 KB
c:\Program Files\MERDS\Output\192168000010\Result8.txt	7/21/2004 11:15:47 PM 1 KB

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