

Windows HPC Server 2008

Overview

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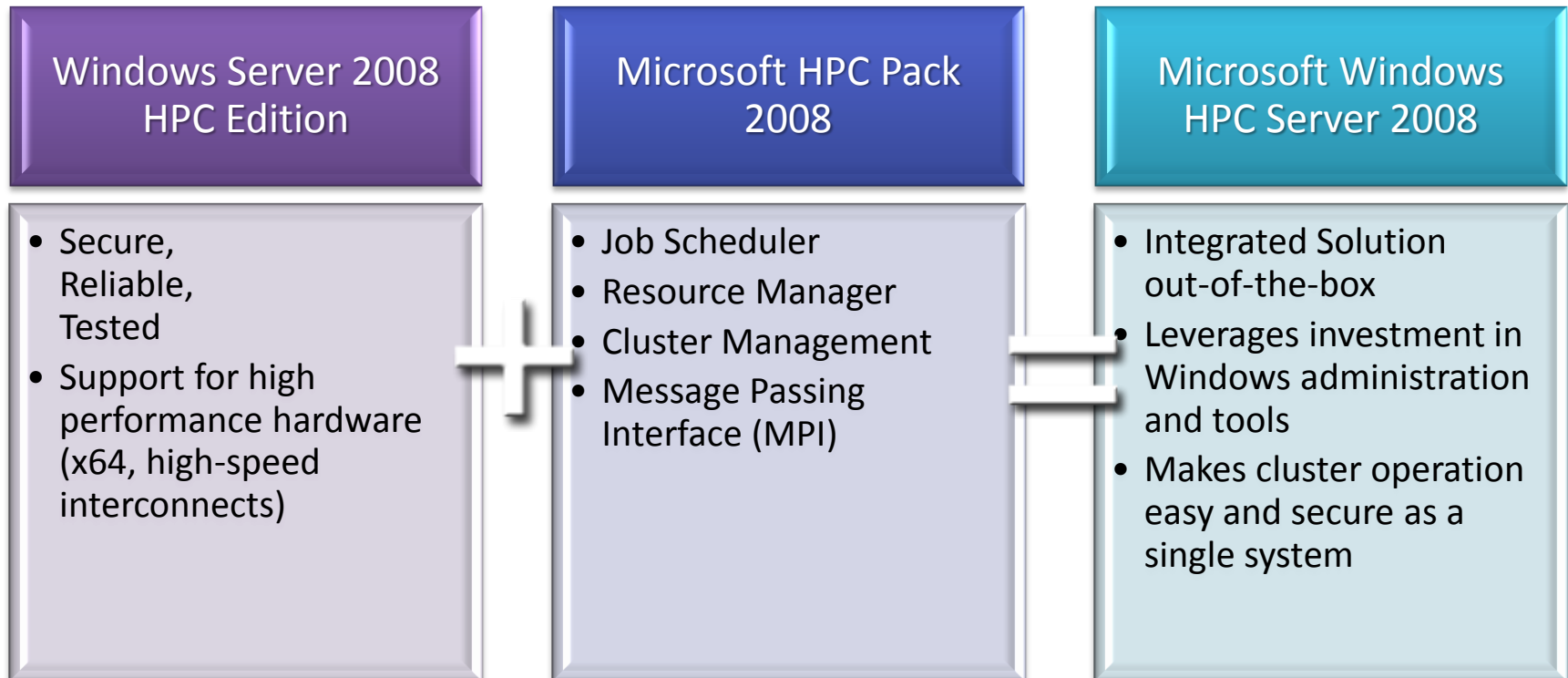
- ▶ **General Overview**
- ▶ **Special Features**
- ▶ **Resources**

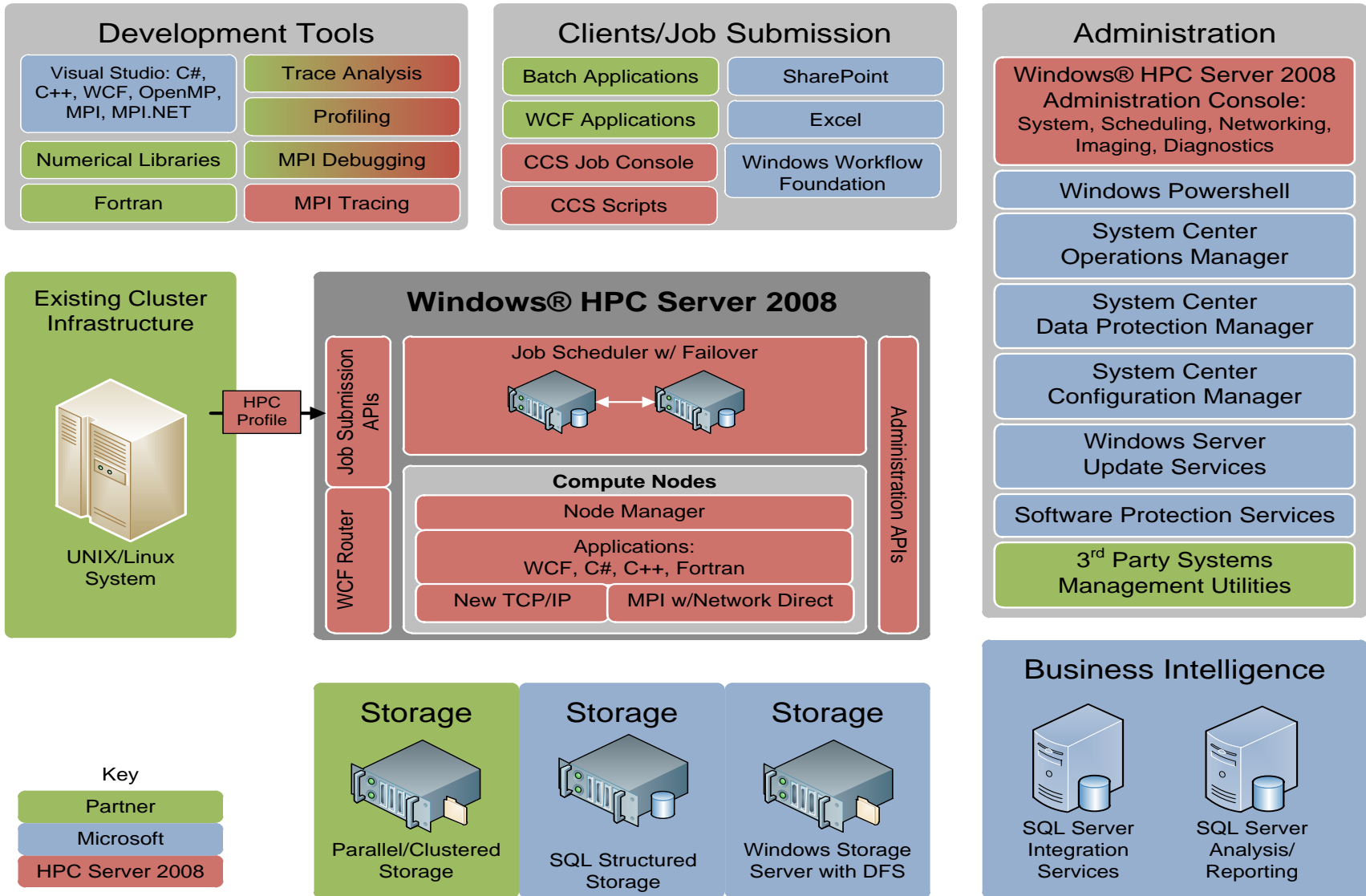
Some material taken from
High Productivity Computing With Windows
(Microsoft Corporation)

General Overview

► Microsoft's goals:

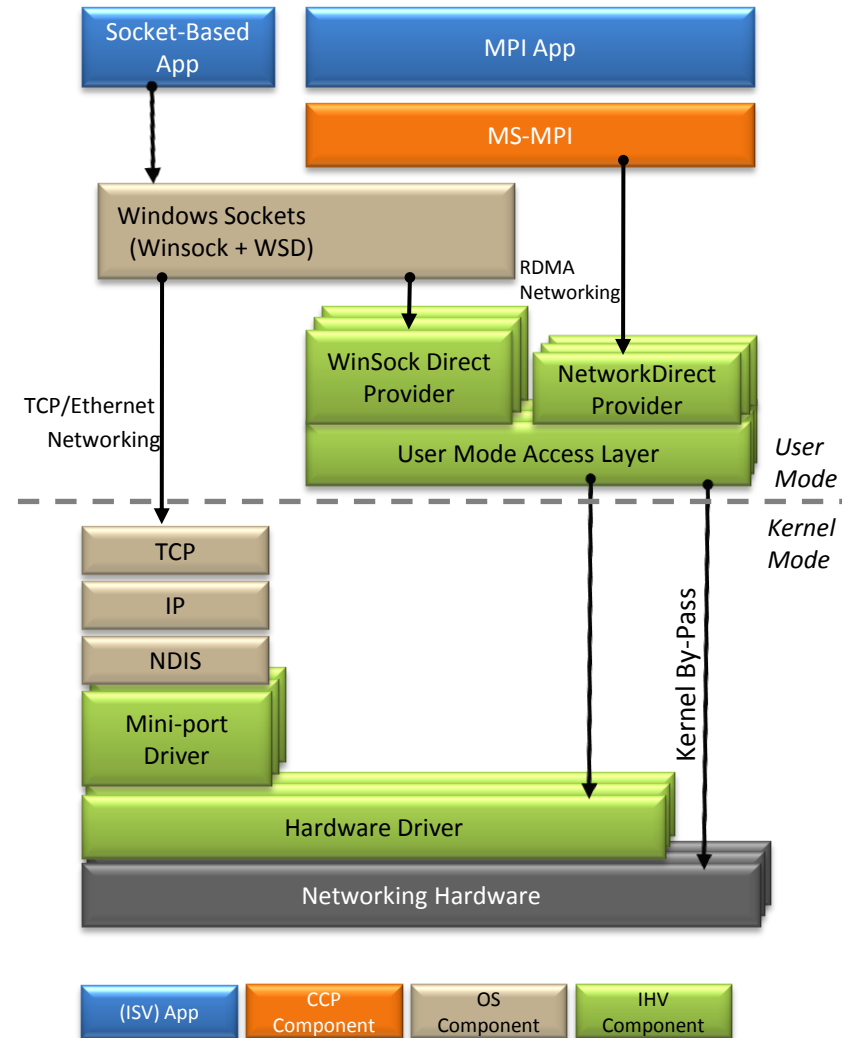
- Complete well-integrated platform for High Performance (Technical) Computing clusters, based on Windows Server 2008 R2 (64 bit) with Integrated Development Environment.





Special Features

- ▶ A new, fast RDMA networking interface (for MPI applications)
- ▶ MS-MPIv2 capable of 4 networking paths:
 - ▶ Shared Memory between processors on a motherboard
 - ▶ TCP/IP Stack (“normal” Ethernet)
 - ▶ Winsock Direct (and SDP) for sockets-based RDMA
 - ▶ New RDMA networking interface



Resources

- ▶ **Microsoft HPC website (Evaluation version available):**
<http://www.microsoft.com/hpc>
- ▶ **Windows HPC Community site:**
<http://www.windowshpc.net>
- ▶ **HPC on MSDN:**
<http://code.msdn.microsoft.com/hpc>

- ▶ **German Windows HPC User Group:**
<http://www.rz.rwth-aachen.de/winhpcug>
- ▶ **Windows High Performance Cluster Competence Center at the CCC (RWTH Aachen University):**
<http://www.rz.rwth-aachen.de/winhp3c>

- ▶ **Blog of the Microsoft HPC Team:**
<http://blogs.technet.com/WindowsHPC/>