

The grid below includes descriptions of Core CAL Suite and Enterprise CAL Suite components, including innovations customers will receive in each component through Software Assurance (SA) upgrade rights.

This grid can be particularly helpful for customers that want to understand the difference between what they are entitled to through Software Assurance, and the new additive (Enterprise) component CALs that are available to them at additional cost.

Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Windows Server® 2008 R2 CAL	Core CAL Suite and Enterprise CAL Suite	Microsoft Windows Server 2008, with built-in Web and virtualization technologies, enables businesses to increase the reliability and flexibility of their server infrastructure. New virtualization tools, Web resources, and security enhancements help save time, reduce costs, and provide a platform for a dynamic and optimized datacenter. Powerful new tools, like Internet Information Services (IIS) 7.0 and Server Manager, provide more control over servers, and streamline Web, configuration, and management tasks. Advanced security and reliability enhancements, such as Network Access Protection and the Read-Only Domain Controller, harden the operating system and help protect the server environment to ensure a solid foundation on which to build businesses. Windows Server 2008 Website	Powerful Hardware and Scaling: Windows Server 2008 R2 was designed to perform as well or better for the same hardware base as Windows Server 2008. In addition, R2 is the first Windows Server operating system to move solely to a 64-bit architecture. Reduced Power Consumption: Windows Server 2008 introduced a 'balanced' power policy, which monitors the utilization level of the processors on the server and dynamically adjusts the processor performance states to limit power to the needs of the workload. Hyper-V™ Virtualization: The new Hyper-V also has core performance enhancements, including the previously mentioned ability to take advantage of up to 64 logical processors and ramp up CPU performance with host support for Second Level Translation (SLAT). Reduce Desktop Costs with VDI: Desktop virtualization will benefit from features including improved personalization management, a near-invisible integration of virtualized desktops and applications in Windows® 7, better audio and graphics performance, a seriously cool Web access update and more. Easier and More Efficient Server Management: Windows Server 2008 R2 also improves on the popular PowerShell	 Making the Experience Better Together with Windows 7 Simplified remote connectivity for corporate computers by using the DirectAccess feature Secured remote connectivity for private and public computers Improved security for branch offices More efficient power management Improved virtualized desktop integration Higher fault tolerance for connectivity between sites Increased protection for removable drives Improved prevention of data loss for mobile users Web Application Platform It offers an updated Web server role, Internet Information Services (IIS) 7.5, and greater support for .NET on Server Core. Virtualization Live Migration Support through Cluster Shared Volumes The version of VDI and remote desktop services in Windows Server 2008 improves the end user experience through new Remote Desktop Protocol capabilities. Improving Power Management and Streamlining Management



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Windows Server® 2008 R2 CAL (continued)			feature introduced in Windows Server 2008. Managing Data: File Classification Infrastructure builds an extensible and automated classification mechanism on top of existing shared file architectures; this enables IT administrators to direct specific actions for specific files based on entirely customizable classification. Ubiquitous Remote Access: Windows Server 2008 R2 introduces a new type of connectivity called DirectAccess—a powerful way for remote users to seamlessly access corporate resources without requiring a traditional VPN connection and client software Branch Office Performance Windows Server 2008 R2 introduces a feature called BranchCache™, which reduces WAN utilization and improves the responsiveness of network applications. Web and Application Server: Windows Server 2008 R2 includes many updates that make it the best Windows Server application platform yet, but one of the most important is the new Internet Information Services 7.5 (IIS 7.5).	The version of VDI and remote desktop services in Windows Server 2008 improves the end user experience through new Remote Desktop Protocol capabilities. Improved data center power consumption management Improved Management of File Services Improved remote administration Improved compliance with established standards and best practices
Exchange Server 2010 Standard CAL	Core CAL Suite and Enterprise CAL Suite	Microsoft Exchange Server 2010 is a messaging and collaboration solution for IT professionals who want to reduce the costs and complexity of delivering secure, reliable business-class e-mail. It helps organizations accomplish more by giving IT departments the increased flexibility and greater control needed to deliver a cost-effective, highly available and secure messaging solution, whether on-premise or hosted, that amplifies their users' business impact. Exchange 2010 Website	Anywhere Access: Enhancements in the latest release of Exchange provide your users access to all of their communications from a single location while making it easier for them to collaborate with each other and their business partners. The ever-growing flow of information into and out of an individual's inbox daily can create overload and affect productivity and profitability. Exchange 2010 adds new productivity features that can help your users more easily organize and prioritize the communications in their inboxes. Flexible and Reliable: The pressure to optimize your IT infrastructure for everchanging business conditions requires you to be agile and that means investing in solutions that provide you and your	Improved User Experience Calendar Sharing Conversation View Mailtips Improved Anywhere Access Outlook® Web access IRM in OWA and B2B IRM Enhanced Mobile and Browser Compatibility Exchange ActiveSync Enhanced Mobile and Browser Compatibility Storage and Administration Wider range of storage hardware options than any other solution, ranging from traditional Storage Area Networks (SAN) to low-cost, desktop-class Direct



MICROSOFT CLIENT ACCESS LICENSE SUITE COMPONENTS AS OF AUGUST 2011



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
			organization choice. Exchange Server 2010 gives you the flexibility to tailor your deployment based on your unique needs and a simplified way to help keep e-mail continuously available for your users.	Attached Storage (DAS). Role Based Access Control Message Tracking
Microsoft Lync Server 2010 Standard CAL	Core CAL Suite and Enterprise CAL Suite	Microsoft Lync Server 2010 gives users real-time presence information and enhanced instant messaging (IM) to help them connect more efficiently and effectively. Lync Server Website	 Stay connected with richer presence information Get instant information with more meaningful contact cards Connect instantly with IM Connect with people outside the organization Keep one contact list 	Improved: PC-to-PC and multi-party IM PC-to-PC and multi-party File Transfer PC-to-PC computer audio PC-to-PC computer video Rich Presence Persistent Group Chat IM/P from Office applications PC-to-PC IM, audio, and video with users at federated organizations & Public IM Networks New: Skill Search Conference Attendee Experience Conference Presenter Experience View application sharing session (Attendee experience)



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Office SharePoint® Server 2010 Standard CAL	Core CAL Suite and Enterprise CAL Suite	SharePoint 2010 is the business collaboration platform that enables you to connect and empower people through formal and informal business communities, within the enterprise and beyond, and to manage content throughout the information lifecycle. Whether deployed on-premises or as hosted services, SharePoint's integrated capabilities are enhanced by search technologies and enable you to rapidly respond to changing business needs by making data-driven decisions and by deploying customized solutions quickly and securely. The consolidation of collaboration solutions onto SharePoint 2010 makes it possible to cut costs by lowering training and maintenance expenses and increasing IT productivity, all within a governable and compliant platform. SharePoint Website	SharePoint Sites delivers a single infrastructure to provide portal and collaboration capabilities across intranet, extranet, and Internet sites. Bring users together to share information, data, and expertise across organizations. SharePoint Content enables all users to participate in a governed, compliant content management lifecycle. SharePoint Content makes it possible to expertly balance user experience with policy and process. SharePoint Communities empowers people to work together in ways that are most effective for them. Allow people to collaborate in groups, share knowledge and ideas, connect with colleagues, and find information and experts easily. SharePoint Search give users the ability to find the content, information, and people they need by combining an integrated, easy-to-manage platform with best-of-breed enterprise search technology.	SharePoint Sites



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
System Center Configuration Manager 2007 R3 Client Management License (ML)	Core CAL Suite and Enterprise CAL Suite	Microsoft System Center Configuration Manager 2007 R3 is the solution for comprehensively assessing, deploying, and updating your servers, clients, and devices across physical, virtual, distributed, and mobile environments. This solution, optimized for Windows and extensible beyond, is a great choice for gaining enhanced insight into and control over your IT systems. System Center Configuration Manager Website	Operating System Deployment: Microsoft System Center Configuration Manager 2007 Operating System Deployment is a highly flexible, automated solution that allows IT administrators to fully deploy and configure servers and desktops from any previous state, including bare-metal deployments. Software Distribution: Configuration Manager 2007 Software Distribution simplifies the complex task of distributing applications and updates to desktops, servers, laptops, and mobile devices across enterprise networks. Software Update Management: Configuration Manager 2007 Software Update Management simplifies the complex task of delivering and managing updates to IT systems across the enterprise. Software Asset Intelligence: Configuration Manager 2007 gives organizations better control over their IT infrastructure and assets through asset intelligence technologies that provide IT administrators continuous visibility into what hardware and software assets they have, who is using them, and where they are. Desired Configuration Management: With Configuration Management, organizations can help ensure that IT systems comply with desired configuration states to improve systems availability, security and performance network wide. Centralized Power Management: Configuration Manager R3 lets IT organizations centrally manage the power settings of Windows 7, Vista and XP computers, helping reduce energy consumption and costs.	With Configuration Manager 2007 R3, organizations get a complete set of power management tools that can help reduce energy costs with minimal effort and expense. Furthermore, Configuration Manager 2007 R3 includes access to Windows Mobile® device management, as well as enhanced scale and performance capabilities that can help reduce the time required to manage today's dynamic IT systems. These improvements include: Increasing the number of supported clients to 300,000 per site. Improved efficiency of Active Directory® communication. Faster discovery of Active Directory changes to users or machines. Fast evaluation of new systems for rapid collection and population of newly discovered devices. Improved Administrator Console response times.



MICROSOFT CLIENT ACCESS LICENSE SUITE COMPONENTS AS OF AUGUST 2011



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Forefront Endpoint Protection 2010	Core CAL Suite and Enterprise CAL Suite	Forefront Endpoint Protection provides centrally managed malware protection for client and server operating systems.	 Comprehensive, multi-layered approach to securing desktop and server environments provides robust, in-depth protection from known and unknown threats, including protection against virus, spyware, rootkits, spam, and Web-based threats. Integration with your existing infrastructure software, such as Active Directory[®] and System Center provides better protection and reduced complexity. 	 Forefront Endpoint Protection 2010 Built on System Center Configuration Manager to provide a single infrastructure for desktop management and security. Automatically detects and removes existing antimalware clients for simplified deployment. Industry-leading proactive detection (AV- Comparatives)



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Exchange Server 2010 Enterprise CAL	Enterprise CAL Suite	Microsoft Exchange Server 2010 Enterprise CAL offers a comprehensive package that includes security services offerings, Unified Messaging, and Compliance functionality. The Exchange Enterprise CAL is sold as an add-on to the Exchange Standard CAL. Exchange 2010 Website	Protection and Compliance: A growing number of applications and devices access your e-mail infrastructure, so it is more important than ever that you consider the protection of your mission critical e-mail data when you choose an e-mail solution. Your organization has many reasons to protect and archive e-mail, from regulatory concerns to internal organizational governance. Exchange 2010 delivers integrated information protection, control, and compliance tools focused on helping you simplify and automate this process. • Compliance: Exchange 2010 delivers new, integrated e-mail archiving and retention functionality-including granular multi-mailbox search and immediate legal hold. • Protection: Exchange 2010 makes it easy to better protect your company's communications and e-mail through centrally managed information control capabilities. Unified Messaging: Exchange Server 2010 offers unprecedented flexibility over traditional voice mail systems that improve daily productivity by consolidating e-mail and voice mail onto one inbox. Unified Messaging also gives users unique and powerful new ways of accessing their information with a telephone, computer, or mobile device.	Protection and Compliance Custom Retention Policies Integrated Email Archive Legal Hold Cross Mailbox Search Information Leakage Protection (Takes a dependency on the Windows Server RMS) Unified Messaging Voice Mail Preview IRM protected Voice Mail Improved Auto Attendant Customizable Call Answering Rules Improved Outlook Voice Access



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Microsoft Lync Server 2010 Enterprise CAL	Enterprise CAL Suite	Microsoft Lync Conferencing makes it easy for users to create, moderate, and join conferences with internal and external users. A rich user experience and a unified interface make it easy for workers to collaborate effectively and often even when time or distance prevents in-person meetings. Lync Server Website	 Reduces T&E costs while increasing the effectiveness of remote meetings through an easy-to-use solution Allows users to easily schedule and conduct online meetings while ensuring that all remote participants can attend and participate successfully with participants both inside and outside of your organization. Out of the box support for multiparty audio/video Ad-hoc and scheduled meeting capabilities 	Improved Initiate ad-hoc multi-party (3+) audio conference (including dial-out to PSTN and/or PBX user) Initiate ad-hoc multi-party video conference Initiate ad-hoc application Sharing (P2P or multi-party) Schedule and host conferences on the audio conferencing bridge (CAA) Schedule web conferences New: Initiate ad-hoc white boarding (P2P or multi-party) Automatically join meeting audio from PBX or other phone number
Office SharePoint Server 2010 Enterprise CAL	Enterprise CAL Suite	Microsoft Office SharePoint Server 2010 Enterprise extends the value of SharePoint Server. In times when business volatility is on the rise and time-to-market is key, SharePoint 2010 enables all users (end users, power users, designers, and professional developers), to customize the out-of-box platform and deploy solutions that will enable them to address specific business needs more quickly and more effectively. SharePoint 2010 includes tools and capabilities that allow businesses to maximize the impact of existing investments and knowledge, and to provide all users with bi-directional interaction with line-of-business data. These tools and capabilities make it possible to shorten the time between recognizing a business productivity solution to address it.	SharePoint Composites empowers users to rapidly respond to business needs by creating their own no-code solutions on-premises or in the cloud, through a rich set of building blocks, tools, and self-service capabilities. SharePoint Insights enables users to access and interact with information across unstructured and structured data sources. Empower users to discover the right people and expertise to make better and more agile business decisions. Do More with SharePoint Search with Fast Technology: SharePoint 2010 is a powerful platform for building custom search solutions and applications using common out-of-box tools. Meet and exceed diverse search needs like 360° customer views with no code customization. Create custom search solutions that expand the use of enterprise applications like CRM and ERP systems. Build search-driven	SharePoint Insights: Business Intelligence Center (Improved Reports Center) Performance Point Services Improved visualizations Calculated KPIs Improved Excel Services with Excel PowerPivot Integration SharePoint Search: Ability to build search-powered applications Search in context Thumbnails, previews, and view in browser Advanced content processing with strong linguistics SharePoint Composites: Office Client LOBI connectivity with Business Connectivity Services (formerly Business Data Catalog) Forms Services



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
		SharePoint Website	applications to fuse structured and unstructured content.	 Visio[®] Services Access Services Improved SharePoint Designer experience
System Center Operations Manager 2007 R2 Client Management License (ML) (Component of the System Center Client Management Suite)	Enterprise CAL Suite (Component of the System Center Client Management Suite)	The System Center Operations Manager 2007 Client ML enables organizations to centrally monitor, report, and manage up to tens of thousands of client systems so support teams can proactively identify high impact client OS, application and hardware issues and eliminate their causes before they increase support costs and impact end user productivity and satisfaction. System Center Operations Manager Website	 Lowers support costs by integrating and extending problem reporting and operations monitoring to client systems. Enables Desktop Support Administrators, Operations, and IT Management teams to more easily identify and resolve issues affecting end users and accelerate problem resolution using Windows operating system and Microsoft Office client knowledge. Reduces costs associated with client application, operating system and hardware failures. Securely and efficiently supports compliance reporting. Optimizes the cost of client monitoring with flexible deployment options including agentless crash monitoring, collective health monitoring. Improves service levels and visibility with end-to-end service management of the entire IT infrastructure including, applications, operating system and hardware. 	New functionality from prior version.
System Center Service Manager 2010 Client Management License (ML) (Component of the System Center Client Management Suite)	Enterprise CAL Suite	Microsoft System Center Service Manager 2010 is an integrated platform for automating and adapting your organization's IT service management best practices, such as those found in Microsoft Operations Framework (MOF) and Information Technology Infrastructure Library (ITIL). It provides built-in processes for incident and problem resolution, change control, and asset lifecycle management. Through its configuration management database	 Reduces costs and improves end-user service levels by enabling end-users to request IT services from a web-based self-service portal. Speed incident capture and problem diagnosis to restore client operations more quickly and cost-effectively; automating incident detection and recording, investigation and diagnosis, resolution and recovery, and providing an escalation for major incidents. Out-of-the-box implementation of MOF/ITIL based systems management best practices including the easy 	System Center Service Manager is a new component to the ECAL Suite



MICROSOFT CLIENT ACCESS LICENSE SUITE COMPONENTS AS OF AUGUST 2011



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
		(CMDB) and process integration, Service Manager automatically connects knowledge and information from System Center Operations Manager, System Center Configuration Manager and Active Directory. System Center Service Manager	customization of workflows and processes to easily adapt to customers operations and environments.	
System Center Data Protection Manager 2010 Client Management License (ML) (Component of the System Center Client Management Suite)	Enterprise CAL Suite (Component of the System Center Client Management Suite)	System Center Data Protection Manager 2010 delivers unified data protection for Windows servers and clients as a best-of-breed backup & recovery solution from Microsoft, for Windows environments. DPM 2010 provides the best protection and most supportable restore scenarios from disk, tape and cloud in a scalable, manageable and cost-effective way. System Center Data Protection Manager for Windows	 Provides an easily managed and scalable solution for backup and recovery of XP, Vista, and Windows7 clients. Supports protection of clients in disconnected environments and over low bandwidth connections. Robust integration with Operations Manager and Service Manager via dedicated management packs, allowing for the seamless management and protection of clients across the enterprise environment. 	Data Protection Manager for Clients is a new component to the ECAL Suite in 2010.



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
Forefront™ Protection Suite •Forefront Protection 2010 for Exchange Server •Forefront Protection 2010 for SharePoint •Forefront Security for Office Communications Server •Forefront Online Protection for Exchange(formerly Exchange Hosted Filtering) •Forefront Threat Management Gateway Web Protection Service	Enterprise CAL Suite	Forefront Protection Suite provides a multi-layered, and highly manageable approach to securing servers from viruses, spyware, rootkits and other malware. The various Forefront Server Security products help protect their respective application servers from the latest malware, as well as inappropriate content. Forefront Online Protection for Exchange provides a hosted messaging protection service, as either an alternative to or an adjunct to onpremises Exchange protection. Forefront Website	 Comprehensive, multi-layered approach to securing desktop and server environments provides robust, in-depth protection from known and unknown threats, including protection against virus, spyware, rootkits, spam, and Web-based threats. Targeted security products, optimized for Microsoft applications servers such as Exchange and SharePoint are easy to deploy, operate and manage, helping protect businesses with greater confidence and efficiency. Integration with your existing infrastructure software, such as Active Directory® and System Center provides better protection and reduced complexity. 	Forefront Server Protection Unique multi-engine approach to antimalware that improves threat detection without adversely impacting performance Premium antispam protection with 99% detection and less than 1 in 250,000 false positives Provides content-based policy enforcement mechanisms Updated protection for Exchange 2010, SharePoint 2010 Forefront Online Protection for Exchange Multiple filtering layers help prevent unwanted e-mail and spam Features to help support configuration and enforcement of e-mail policies Comprehensive set of SLAs backing network performance and spam/virus filtering effectiveness Forefront Threat Management Gateway Web Protection Service* Provides access to aggregated data from multiple URL filtering vendors and the antiphishing and malware technologies that also protect Internet Explorer 8 users to block malicious and inappropriate sites Provides updates for highly accurate malware detection *Requires Forefront TMG 2010 (licensed separately).
Forefront Unified Access Gateway	Enterprise CAL Suite	Forefront UAG, the next-generation release of Intelligent Application Gateway, delivers secure, anywhere access to messaging, collaboration, and other resources, increasing productivity while maintaining compliance with policy UAG provides a single solution for administrators to deliver access and	Anywhere Access: Forefront Unified Access Gateway makes it easier for organizations to deliver enhanced security for remote access to their applications and resources and improve employee and partner productivity, by combining an intelligent access policy engine and consolidating a variety of connectivity options including SSL VPN	Unified Access Gateway is a new component to the ECAL Suite in 2010.



Product	Available In	Description	Key Benefits	Why Upgrade to Latest Version?
		implement granular policies based on the user's identity and the health of their device. Unified Access Gateway Website	 and Direct Access. Integrated Security: Forefront Unified Access Gateway improves the security in remote access scenarios by enforcing granular access controls and policies that are tailored to the applications being published, the identity of the user and the health status of the device being used. Simplified Management: With Forefront Unified Access Gateway, administrators have a single platform through which to deliver and manage remote access. With built in policies and configurations for common applications and devices, administrators gain more control, more efficient management, greater visibility, and lower total cost of ownership. 	
Microsoft Windows Rights Management Services	Enterprise CAL Suite	Microsoft® Windows® Rights Management Services (RMS) for Windows Server™ 2008 enhances information security and compliance, improves operational efficiency, and helps new business initiatives and processes by safeguarding information from unauthorized use. AD RMS augments an organization's security strategy by protecting information through encryption and persistent usage policies that define how recipients can use the information, no matter where it goes or how it is stored, online and offline, inside and outside the firewall. With AD RMS, organizations can help eliminate unauthorized viewing and distribution of sensitive corporate data. Rights Management Services Website	 Enhanced safeguards for confidential and sensitive business information Apply persistent protection that lives with the document or email Flexible and customizable information protection platform Low-overhead administration and ease of use for end users Helps protect Emails created in Exchange and Documents created by Microsoft Office 	 Federated Collaboration: AD RMS uses Active Directory Federation Services to allow enterprises to leverage their established federated relationships to enable collaboration with external entities. Enhanced Exchange 2010 Integration: Transport protection rules enable an administrator to automatically apply Information Rights Management protection to e-mail (including Office and XPS attachments) after a message is sent. Support for RMS in Outlook® Web Access (OWA): enables users to read and create IRM-protected messages natively, just like in Outlook.