

## **Hardware Requirements, Technical Details and Additional Terms and Conditions**

These hardware requirements, technical details and additional terms and conditions are subject to change from time to time at the reasonable discretion of Diamond Technologies, Inc. ("Diamond"). Depending on the Services subscribed to, some items may not apply.

### **Hosted Desktop Expectations:**

For those clients subscribing to Diamond's Hosted Desktop service, Diamond provides a default virtual desktop environment that has been limited to features and customizations based on best practices that support security and performance. Diamond can customize the end-user desktop just like customizations on a local PC that is not locked down by an administrator. Personalization of the background and background color of the hosted virtual desktop is restricted. Administrative tools such as access to the command prompt, shutdown of the virtual desktop, and many of the control panel items have been removed or restricted.

Although the hosted virtual desktop can provide video and sound, these features are only enabled upon request due to the increased bandwidth and shared server workload requirements. The Client is responsible for any costs at Diamond's applicable rates to configure and support any environment that requires customizations to the end-user desktop experience. It is suggested that end-users who have requirements to watch video, stream music or sound from an Internet source, or play local media such as a DVD should perform these tasks on the local PC. For more information on performance expectations and industry standards, please contact Diamond at (877) 716-TECH (8324).

### **Hardware Requirements:**

To access our Services you must provide at the very minimum:

- (a) an Internet connection with sufficient bandwidth and quality to allow trouble-free browsing, data uploading and downloading and that does not constrain Microsoft® Exchange functionality;
- (b) PC/Laptop with Windows XP SP2 or later, or Mac OSX 10.7 or later, or a compatible Thin Client to access the Exchange server using Microsoft® Outlook RPC/HTTP;
- (c) A fully functional Internet browser to access the control panel and Exchange server using OWA;
- (d) A fully functional POP/IMAP/SMTP e-mail program (client) such as Microsoft® Outlook Express and;
- (e) All devices must have local Anti-Virus software that automatically updates.

Your technical liaison(s) can use the Website and/or our Client support or sales personnel to obtain information about compatible equipment, software and services, but we make no representation, warranty, assurance or other promise that your equipment will be compatible with our Services.

### **Client Supplied Software and Third Party Access:**

Client is responsible for any time and material costs to support any 3<sup>rd</sup> party or line of business software. This includes time to resolve any issues, updates, patches, or suggested configurations that will be performed. We will contact 3<sup>rd</sup> party vendors for additional information to determine or resolve as commercially reasonable any user issues including:

- Confirming there are no known issues of the application
- Validating recommended configuration
- Confirming patch level of application and operating system

Client-supplied software listed will be installed by Diamond on the dedicated client server with the assistance of the client's third party provider if needed. Client is required to have a current support or maintenance contract on all client supplied software. All licensing, CDs, upgrades, maintenance,

troubleshooting, and technical support of the client application are not included in this agreement. Requested work on these applications, such as upgrades and patches, will be billed at time and materials or discount programs rates. This includes modifications to applications, databases and Citrix Servers. Requests for upgrades or maintenance on client provided applications must be received the Friday prior to the scheduled maintenance period.

As new users are added to the environment, Client is responsible for the purchase of the additional Client-supplied software and licenses.

Client or Client's third party provider may be given a login to install and support their application for Client. Any accidental damage to Your Data or server infrastructure is your responsibility. Assistance in repairing any loss or damage will be handled at standard time and materials.

### **Server Software.**

- Software Configuration. We will exercise industry standard practices to ensure that all preinstalled software is correctly configured. If there is more than one way to configure the software, we will choose the configuration we determine, in our sole discretion, to be most appropriate.
- Patches, Updates and Service Packs. We will use commercially reasonable efforts to install security patches, updates, and service packs. Software updates may change system behavior and functionality, negatively affecting the Services you purchased. We cannot foresee nor can we be responsible for service disruption or changes in functionality or performance due to implementation of Software patches and upgrades. If such disruption or changes occur, we will use commercially reasonable efforts to help you remedy the situation after our actual knowledge of it.
- Required Upgrades. We may be required by our Licensors to upgrade to the latest versions of the Software. Third-Party Licensor required upgrades will be performed free of charge and upon reasonable notice to you. Software upgrades on our servers will occur at our discretion upon reasonable notice to you.

Incompatibilities. We are not responsible for problems that may arise from incompatibilities between new versions of the Software and your content and Your Data, regardless of whether it was a requested, required or a discretionary upgrade.

### **Services Management Agent.**

You agree that you will not interfere with any services management software agent(s) that Diamond installs on the hosted system. Diamond agrees that its agents will use only a minimal amount of computing resources, and will not interfere with your use of the hosted system. Diamond will use the agents to track system information so that it can more efficiently manage various service issues, such as patching exceptions and product life cycles. Diamond may also use the agents to identify security vulnerabilities. Diamond will not use the agents to view or capture your content or data. Your Services will become "unsupported" and you will be in breach of the Agreement if you disable or interfere with our services management software agent(s). You agree that Diamond may access the hosted system to reinstall services management software agents if you disable them or interfere with their performance.

**Storage Capacity; Data Transfer; Server Resources.** Each of your accounts is allotted storage capacity and data transfer amounts on our servers according to the plan and options you select. This storage size and data transfer allotments can be increased for an additional charge up to the maximum amount allowed for each plan or service. The servers may stop accepting, processing, or delivering data when the purchased limit is reached, thus causing Service unavailability or data loss. We shall not be responsible for such unavailability or data losses. Server resources are shared among all customers hosted on the same server(s). We configure servers, Services and storage in such a way that you are separated from other customers.

### **Connectivity:**

A minimum level of connectivity is required to support a reliable connection to the hosted environment.

Business class services with static IP addresses from a major local service provider is mandatory. Many considerations impact the determination of what type of connectivity should be used, or if your existing connectivity can be used to support access to the hosted environment.

The following guidelines can assist in determining if your connectivity is sufficient:

- Each user accessing the standard virtual desktop environment should be allotted a minimum of 30kbps per simultaneous connection. Example: if you have 100 users at a location, you would want to ensure that you have  $30\text{kbps} \times 100 = 3\text{Mbps}$  of bandwidth minimum to support these users.
  - For Private Cloud users utilizing a VDI technology to present a full desktop experience, use 85-120kbps per simultaneous connection.
  - Use of video, or heavy scanning, printing or internet based file share services may require additional bandwidth.
- Latency of 100ms and above between the end-user and the hosted virtual desktop environment will begin to degrade the end-user experience. Latency is the time taken for a sent packet of data to be received at the other end. It includes the time to encode the packet for transmission and transmit it, the time for that data to traverse the network equipment between the nodes, and the time to receive and decode the data. Latency can be tested using a variety of tools available for free on the Internet, but these tools must be used from end-to-end and not to a random point on the Internet to determine the effective latency between the end-user and the hosted virtual desktop. Any packet loss is also unacceptable.
- Private Wide Area Network (WAN) connectivity can be used to overcome issues with unacceptable latency. This type of private connectivity also provides redundancy and security, but at a more significant cost than Internet only connectivity.

Standard resolution of performance issues involves basic troubleshooting of network connectivity. You are responsible for any costs of remediating network performance issues, including but not limited to: coordinating with the local connectivity provider in depth testing of connectivity, reconfiguration of devices in-line with the end-user and hosted virtual desktop, isolation of intermittent issues caused by local network environment including software and configuration of the end-user PC, Internet outages, and power outages. Industry standard tools will be used in searching for the root cause of ongoing or non-reproducible network performance issues.

We recommend utilizing Watchguard or Cisco firewalls at the client's location when possible. Firewalls by other manufacturers may raise installation and support costs due to additional troubleshooting. We require READ access minimum to all firewalls whether or not they are third party, Watchguard, or Cisco. User upgrades and add-ons such as Antivirus or content filtering should be coordinated with us directly. The client is responsible to keep the device updated on current software/firmware revisions and for any costs of remediation caused by failure to adhere to any guidelines or recommendations in these terms and conditions or the related Service Level Agreement.

#### **End-user Devices:**

You are responsible for all hardware, software, installation, and support costs for devices used to access the hosted environment after the original hosting install. This includes PCs, Laptops, thin clients, smart phones, tablets, mobile devices or other equipment. Diamond will provide documentation for installing and accessing the hosted environment for additional devices. For clients subscribing to Diamond's Hosted Desktop service, devices must explicitly support the Citrix Receiver application. Installation support is not included and is billed at time and materials or discount program rates. All devices must have a local Anti-Virus program that automatically updates. Device support and end-user support that fall outside of the original hosting install will be tracked separately on a billable basis.

Diamond will use a test account on a standard workstation with the Citrix Receiver to validate the hosted environment. Any support that falls outside of the hosted environment is not included and is billed at time and materials or discount program rates. Please contact Diamond for a list of compatible thin clients.

### **Email Performance:**

We monitor our servers and the Services as a whole but do not monitor individual mailbox or mobile device availability. To verify Service Availability, we use a combination of methods to validate availability, including but not limited to Exchange HTTP access availability and internal mail flow monitoring between Edge and Mailbox servers. These checks are run on predetermined intervals with specific failure thresholds with respect to the service being provided. If two or more consecutive tests fail, the lack of Service Availability will be noted as the number of minutes between the first and the last failed tests. Any unavailability less than five minutes in duration will not be recorded.

We do not guarantee incoming and outgoing mail delivery time and thus it is not included in its calculations or considered an outage if mail flow is delayed. If a delay in mail flow is due to a complete Service, server, or network outage, Service Availability will be calculated related to those services only. We will use commercially reasonable efforts to provide reasonable times for incoming and outgoing mail flow.

Microsoft Office Outlook users may experience poor performance when they work with a folder that contains a large number of items in a mailbox (as defined below) that is running on Microsoft Exchange Servers. Typically, Outlook users may receive one of the following messages:

- *Requesting data from Microsoft Exchange Server*
- *Outlook is retrieving data from the Microsoft Exchange Server*

This issue occurs when Outlook must perform several operations against the Exchange server to retrieve a folder's contents. Therefore, when a folder contains many items, additional processing is required to respond to the Outlook requests. We require that your folders not exceed a range of 3,500 to 5,000 items depending on the Exchange Server environment's capacity to support the established performance baselines. Top-level folders or sub-folders can be created underneath the Inbox and Sent Items folders to reduce the number of the folder's items. The client is responsible for any costs caused by failure to adhere to these recommendations or any other guidelines in these terms and conditions or in the Service Level Agreement.

The following list includes ways that you can help manage the number of items in folders:

- Use folder hierarchies to help keep the number of items in a folder to the recommended values.
- Use mailbox manager policies.
- Use client-based archiving solutions.
- Use server-based archiving solutions.
- Use mailbox size limits.

For more information on industry standards for managing Outlook mailboxes, you can visit:

- <http://support.microsoft.com/kb/905803>
- <http://msexchangeteam.com/archive/2005/03/14/395229.aspx>

### **Hosted Exchange Limitations.**

- Mailbox and Public Folder Storage Capacity. Both your mailbox and public folders have their own storage limits. When the storage limit is reached on an individual mailbox or folder, the Exchange servers will stop sending and/or receiving messages or data leading to possible Service unavailability or data loss. To prevent such occurrences, you can manage each mailbox and public folder storage limit using our Website's administrative control panel. We are not responsible for unavailability or data losses caused by any mailbox or folder exceeding its storage limit. You can at any time obtain a detailed disk usage report from our Website's administrative control panel.
- Log Files. We adhere to a daily log maintenance and clean-up schedule to maximize disk space for our Services.

- Top Level Folders and Sub-Folders. The Exchange server itself retains ownership of the two top layers of the public folder hierarchy, "Public Folders", and under that folder, the "All Public Folders". This is set by the Exchange server architecture and cannot be modified. The administrative control panel on our Website allows you to create and manage mail-enabled Top-Level public folders. Only Top-Level public folders can be made visible in the Global Address List. Only Top-Level public folders can be made mail-enabled.
- Address Lists. We provide one Global Address List and one Offline Address List for your account. The Global Address List and Offline Address List are available to all users within your account. The Global Address List contains all mailboxes, contacts and distribution lists for your account, unless you explicitly choose to hide any of these objects from your Global Address List. Your Offline Address List is a replica of Global Address List. Your Offline Address List is used when you are working offline or, in MS Outlook 2003 or above, in the activated cache mode. The Global Address List is replicated to Offline Address List on a daily basis.
- Anti-Virus Checking. We use third-party anti-virus Software. This Software is configured to check all inbound messages. The virus-detecting heuristics of the Software are regularly updated. Messages sent between mailboxes on the server are not scanned. If a virus is detected or if a message attachment cannot be scanned (for example, when it is encrypted or corrupted), the message and its attachments may be permanently deleted. For Secure Mail customers, encrypted messages will not be deleted. Messages with attachments larger than 5MB are not scanned. We advise you to use up-to-date, local anti-virus software. We are not responsible for any damages due to viruses, including infection of end-user devices or lost or corrupted messages.
- Anti-Spam Message Filter. We install third-party anti-SPAM Software on our servers. This Software is configured to check all incoming messages according to the SPAM-detecting heuristics provided with the Software. As a part of the anti-SPAM Software service, the SPAM-detecting heuristics are regularly updated. We are not responsible for any damages due to anti-SPAM filtering, including lost or corrupted messages.

### **Preventative Maintenance:**

Diamond performs monthly maintenance for all hosted solution and dedicated client servers. Additionally, Diamond performs quarterly failover testing and maintenance to enhance full redundancy and optimal network performance across the hosted environment.

All software installs, updates and accepted custom requests from clients will be performed during these mandatory scheduled monthly maintenance periods for all hosted solution and dedicated client servers. All requests for client application upgrades will be performed during this maintenance window, unless resolution of an application failure is dependent upon emergency maintenance.

While we expect that this maintenance will have no impact on service performance, customers who use any hosted environment resources may experience intermittent latency and short outages of less than five minutes as we test failover components and core switches.

Items that fall under the scope of covered preventative maintenance include:

- Global Backend Maintenance: Any modification which affects a wide range of clients
- Shared Hosted Solution Maintenance: Any maintenance on shared Active Directory, Email, SharePoint servers
- Shared Network Infrastructure Maintenance: Updates and ongoing support for switches, firewalls, routers, and cabling used at hosted environment data center locations

Maintenance on dedicated client servers is not included in the scope of covered preventative maintenance but is still required to maintain the integrity of the hosted environment and a minimum level of performance. This includes:

- Localized Server Maintenance: Work that affects a single set of Clients

- Dedicated Client Application/Utility servers
- Client line of business applications

**User Administration:**

The initial provisioning of a user account and any additional user accounts is included in the monthly fee for that user. The monthly fees are based on a minimum number of users that must be maintained. Their initial setup and associated configurations include the following:

- Setup Users and password
- Setup user rights, access, and security
- Setup of email address and mailbox if included in that user's solution
- Setup of applications included in Services as outlined in the proposed solution

Ongoing administration of users and security is not included in the monthly infrastructure and licensing fees and is billed based on time and materials or your discounted support program rates. Projects and requests that fall outside of the original hosting install will be tracked separately on a billable basis. These include but are not limited to the following:

- User changes and modifications
- Managing passwords, user rights, access, and security
- Setup of additional applications
- Managing permissions and file management
- Creating new directories, shares, and groups

You may be provided with our online account and server management tools, the administrative control panel and/or the end-user control panel. These tools are designed to give you control over your account and the Services. Our technical support personnel can help you to initially become familiar with control panels; however, our technical support are not obligated to perform for you, or help you perform, the tasks that can be, and customarily are by our other customers, done through control panels. These tools may allow you to add, disable and delete accounts. Care must be taken when using these tools. Adding, disabling and/or deleting accounts may affect the fees charged in accordance with the Service Agreement. Deleting accounts usually also deletes the data for the account. Great care must be exercised when deleting accounts as there is no "undo" button. Should an account inadvertently be deleted rather than disabled, Diamond may, at its discretion and for an additional fee, restore a deleted account.

**Antivirus Protection:**

Diamond provides an enterprise class antivirus solution on all hosted shared servers and dedicated client servers. Installation of this antivirus is mandatory and must remain on all hosted environment servers including dedicated client servers.

The client is responsible for any cost associated with infection, or malware that cause issues with access to the hosted environment, or that impacts performance while connected. The performance impact of an infection may not be limited to the workstations or individual user and may affect both shared hosted resources in addition to dedicated client servers. The client is required to have current and updated antivirus software on any device (workstation, laptop, thin client, smart phone, tablet, etc.) used to access the hosted environment. Antivirus software for these devices is not included in Diamond's solution but is

available for additional licensing and fees. The client is responsible for any costs of remediation caused by failure to adhere to any guideline or recommendation in the Service Level Agreement.

**Printing and Peripherals (Hosted Desktop):**

As the user logs onto the Remote Desktop session, Citrix will attempt to create and default to the local workstation's default printer. If a printer is not pre-installed on the server, Citrix will automatically attempt to create a redirected printer dependent on printer compatibility with Citrix. If there is no working printer driver installed and the printer is compatible with Citrix, the Universal Print Driver will automatically be used.

Due to the multitude of printers in production, it is not feasible for Diamond to test every printer. We require all devices to be checked for compatibility with the printer manufacturer site to confirm printer drivers are supported in Citrix. We recommend all clients use network printers instead of printer redirection when possible. Shared local network printing via Citrix is not supported.

The client is responsible for any printing related costs including hardware, consumables, installation, incompatibility and ongoing support. Printers that are not expressly supported or are not identified during the original hosting install will be tracked separately on a billable basis.

Multi-function printers and scanners will require SMTP relay from the local ISP to allow successful email relay functionality. The local ISP must provide SMTP relay services, otherwise Diamond cannot support this functionality. Limited USB scanning features are available but are not recommended. The client is responsible for any cost associated with the installation and support of remote scanning function outside of the basic scan to email capabilities. Printing and scanning requests that fall outside of the original hosting install will be tracked separately on a billable basis.

**Data Storage:**

All data will be stored utilizing highly redundant storage technologies such as SAN and Raid-5 Disk Arrays combined with proactive monitoring to enhance data availability. Failure of redundant components can be detected and repaired before any interruption in service occurs.

Storage for email is considered separate from your file and data storage. Each user is allocated 3 GB of storage within their Exchange mailbox in their base monthly fee. If user exceeds the 3 GB limit a notification will be sent to the user to reduce mailbox size. Email service includes anti-spam filtering and Microsoft Exchange Active Sync. Historical email is email a client has in their exchange database prior to a scheduled go live date. Historical email is available upon request and can be uploaded into Archived email with a setup fee and ongoing monthly fee.

Unlimited email storage is available upon request and for additional fees. Unlimited storage is the combination of the users' Exchange mailbox and the users' archived email storage. Users will have access to their Exchange Mail Box and Archived Mail Box at all times. Search functionality is included.

**Dedicated Client Server Upgrades:**

Client requested upgrades to dedicated solutions or infrastructure may incur additional costs and will be added to the agreement with signed addendums.

**Out of Scope Items:**

Projects and requests that fall outside of the original hosting install will be tracked separately on a billable basis at time and materials or at discount support program rates. The following items are specifically excluded from coverage in the Cloud Solution. This list is not considered comprehensive.

Support Services

- Users' PCs, Laptops, thin clients, smart phones, tablets and other mobile devices support for both hardware and software
- Network Support

- printer/scanner installation, setup, support, and troubleshooting
- firewalls, switches, routers, modems, cabling, and miscellaneous equipment
- Virus, Malware, or any other type of infection on devices used to access the hosted environment
- Toners, ink cartridges, drums, or rebuilds of printers
- Phone systems, fax machines, copiers
- All fees and renewals for Domain registration, SSL Certificates, and web hosting (Cost of purchase + Time and Materials)

#### Connectivity

- All connectivity charges for Internet, Point to Point, WAN
- Connectivity consulting and troubleshooting
- Client Firewall devices
- Service provider outages other outages including those due to client power failures

#### Applications

- All licensing, CDs, upgrades, maintenance, troubleshooting, and technical support of the client's dedicated applications are not included in this agreement.
- Requested work on client applications such as upgrades and patches, rebuild or maintenance on client databases, or installation of all future applications

#### Upgrades to Client's hosting infrastructure

- Servers added to hosting environment to support additional applications, features, and functions (Quote based on requirement and added to monthly fee).
- The fee for additional Terminal Servers is included in the per user cost; based upon an average use of 25 users per Terminal Server. If additional Terminal Servers are required for specific users, specific applications or enhanced performance, additional charges will be added to client's monthly fee. (Quote based on requirement and added to monthly fee).

#### Email and Blackberrys

- All custom Outlook and Exchange requests
- One mail box per Outlook profile is included at no charge. Labor for adding mailboxes, users to distribution groups, and adding one alias per user is included at no charge.
- BlackBerry and other mobile devices
- Email archiving requests to search for client emails and compliancy requests

#### Miscellaneous

- File Restores and Mailbox Restores, may take up to 24-48 hours to restore a file or mailbox.
- SharePoint site customization is not included
- All user training is not covered. This includes but is not limited to training for features and functionalities of Microsoft Office and Adobe Acrobat Reader.
- Microsoft Office customization support is not included. Examples would include creation of macros, tables, templates, graphs, integration, etc.
- Exports of user data or email to a device for clients use.