BLACKBOARD LEARN MANAGED HOSTING
TERMS, SPECIFICATIONS & SERVICE LEVELS

TERMS APPLICABLE TO BLACKBOARD MANAGED HOSTING SERVICE

Below are certain terms and conditions applicable to the managed hosting Services. Definitions used but not defined herein shall have the meanings ascribed to them in the Master Services Agreement or the applicable Order Form between Customer and Blackboard. These terms are subject to change by Blackboard from time to time, with or without notice to you, and any such change shall be effective upon posting.

1. **CERTAIN DEFINITIONS**.
   a. "**Active User Capacity**" means the number of Authorized End Users, at any particular time, permitted to be registered to access one (1) or more educational courses provided through the Hosted Software, as set forth on an Order Form.
   b. "**Agreement**" means the terms and conditions applicable to the provision of the Services, which shall include any Order Form, the Master Services Agreement and the terms and conditions herein.
   c. "**Available Date**" means the date upon which Customer receives notice from Blackboard that the Hosted Software is available to provide service.
   d. "**Excusable Event**" means any event beyond Blackboard's reasonable control, including but not limited to fires, floods, earthquakes, hurricanes, tornadoes, elements of nature or acts of God, wars, terrorist acts, site-specific terrorist threats, riots, civil disorders, rebellions or revolutions, strikes, lockouts or labor disputes, interruption or failure of telecommunication or digital transmission links and Internet slow-downs or failures.
   e. "**Hosted Software**" means the Software licensed to Customer for which Blackboard is to provide the Services.
   f. "**Services**" or "**Managed Hosting Services**" means the managed hosting services provided by Blackboard pursuant to the Agreement.
   g. "**Service Levels**" means the service levels set forth herein. The Service Levels may be changed from time to time by a posting to Blackboard's website, and Customer's continued use of the Services constitutes consent to such change.
   h. **"95th Percentile calculation"** – 95th Percentile calculation is performed by: 1) collecting IP traffic samples (both inbound and outbound traffic) over the course of a month; 2) discarding the top 5 percent of the highest peak samples; and 3) measuring the peak usage from the remaining samples.

2. **BLACKBOARD RESPONSIBILITIES**.
   a. **Provision of Access to Hosted Software**. Blackboard will make access to the features and functions of the Hosted Software available to Customer's Authorized End Users. Blackboard will specify to Customer procedures according to which Customer and/or its Authorized End Users may establish and obtain such access. If Customer does not take the required steps to enable or access the software or SaaS Services within 90 days of the Effective Date of the applicable order form, then delivery of such software shall be deemed complete.
   b. **Responsibility for Hosting.** Blackboard shall host the Hosted Software on behalf of Customer. Blackboard shall be responsible for the setup and configuration of the necessary hardware, software and all components of the server(s) on which the Hosted Software will reside. This includes the server hardware and software, telecommunications hardware and software, security software and other software that is reasonably necessary to host the Hosted Software. Blackboard shall also install and store the Customer Content for purposes of access by the Hosted Software. However, Blackboard shall have no responsibility for the design, development, operation or maintenance of any Web site owned or operated by Customer, or with respect to any telecommunications or computer network hardware required by Customer to provide access from the Internet to any such Customer Web site. To the extent necessary to perform Blackboard's obligations under the Agreement, Customer grants to Blackboard a royalty-free, non-exclusive, worldwide license to use, reproduce, transmit, distribute, perform, display, and, to the extent required by the Hosted Software, modify and create derivative works from the Customer Content.
   c. **Availability and Operational Specifications.** Blackboard will deploy infrastructure in a facility that offers environment control, security, and backup power. Blackboard will use commercially reasonable efforts to ensure that the Services will be available and accessible twenty-four (24) hours per day, seven (7) days per week according to the specifications set forth in the Service Levels. Notwithstanding the foregoing, Blackboard will have no liability for any failure to meet a Service Level to the extent arising from (i) any use of the Hosted Software by Customer or any Authorized End User other than in accordance with the terms and conditions set forth in the Agreement; (ii) any failure by Customer or any Authorized End User to comply with any procedures, technical standards and/or protocols specified by Blackboard from time to time; or (iii) an Excusable Event. It is agreed and acknowledged that the service credits referred to in the Service Levels shall be Customer's sole remedy, and Blackboard's sole obligation, with respect to failures of the Services to meet the Service Levels. Blackboard does not warrant or guarantee the Services except as expressly stated in the Agreement.
   d. **Data Restoration Policy.** Blackboard will perform daily back-ups and archive Customer Content for 30 days. In the event that Customer requests recovery of any lost or damaged Customer Content, Blackboard will use commercially reasonable efforts to restore the relevant data from the most recently archived copies (or such earlier copies as requested by Customer), provided that such data is, at the relevant time, still available pursuant to the applicable retention policy and Customer has provided to Blackboard all information necessary to enable Blackboard to perform such restoration services. Blackboard shall perform up to four (4) data restorations per year at no charge to Customer. Additional requests will be charged at Blackboard's then-current rates. In the event of a disaster, Blackboard will use reasonable efforts to restore service. Blackboard will not attempt to restore service if such attempt may in Blackboard's sole discretion, put Blackboard, its employees or its agents at risk for injury, or cause an unreasonable risk to service delivery levels for other clients.
   e. **Data Archiving and Cleanup Policy.** Blackboard will undertake commercially reasonable efforts to accommodate Customer requests for standard bulk data archiving and cleanup, such as batch copying of courses for a new semester; batch export, import, and archive of courses; batch removal of courses; batch disabling or deleting of users; and exporting usernames / courses from a database query. Blackboard will use reasonable efforts to address Customer's requests for data archiving and cleanup related matters, up to 4 per year or according to such other frequency as Blackboard then offers. Additional requests will be charged at Blackboard's then-current rates.

f. **Additional Storage and Bandwidth Policy.** Blackboard will monitor Customer's storage and bandwidth usage against contracted levels. Excess bandwidth and storage will be charged at Blackboard's then-current rates. From time to time, Customer and Blackboard may adjust Customer's contracted bandwidth and storage limits via Blackboard's standard change order process, which may involve the payment of additional fees.

g. **IP Addresses.** Any IP addresses assigned or allocated to Customer by Blackboard shall remain, at all times, the property of Blackboard and shall be nontransferable by Customer. Customer shall have no right to use such IP addresses upon termination of this Agreement. Any change requested by Customer to the Blackboard allocated addresses must be agreed to by the Parties. Customer understands that the services provided under this Agreement relating to IP addresses (including Internet use) may require registrations and related administrative reports that are public in nature, and Customer shall have no claim against Blackboard relating to such public registrations and reports that are required for Blackboard to perform its obligations hereunder.

h. **Monitoring and Performance.** Blackboard will make network performance reports available to Customer via www.behind.blackboard.com or as reasonably requested. These reports are designed to provide usage and performance information to help in the continual monitoring and improvement of the design and operation of the hosted environment. In addition, upon request by Customer, Blackboard will provide Customer with monthly reports including information on Managed Hosting Services usage, system outages and changes made to the Blackboard system during that month. Customer acknowledges and agrees that any reports provided by Blackboard to Customer pursuant to this Schedule shall constitute Blackboard's Confidential Information for purposes of this Agreement.

i. **Outages**. In the event of an outage (i.e., the Hosted Software is not Available (as defined below)), Blackboard will keep Customer reasonably informed as to the cause and estimated time for restoration of the Managed Hosting Services, to the extent known by Blackboard at the time. Blackboard will promptly commence remedial activities and use commercially reasonable efforts to resolve the outage as quickly as reasonably possible. Following recovery from any such outage, Blackboard will provide Customer with a post-incident summary that includes the cause of the System Outage (if determined), the method used to correct the problem; and any measures Blackboard will take to prevent similar future outages.

3. **CUSTOMER RESPONSIBILITIES**.

a. **Procedures**. Customer shall follow Blackboard-prescribed procedures in the implementation and maintenance of the Service. Upon implementation, Customer shall provide Blackboard a URL and any other information required by Blackboard to perform its obligations herein. Blackboard shall provide Customer with procedures for access. The procedures may include, without limitation, provision of any access codes, passwords, technical specifications, connectivity standards or protocols, or any other relevant procedures, to the limited extent any of the foregoing may be necessary to enable Customer to permit its Authorized End Users to access and use the Hosted Software as contemplated herein.

b. **Other**. Blackboard is not responsible for Customer's management and use of the features and functions of the Hosted Software. Customer bears all responsibility for such management and use, including, without limitation:

- Creating/removing users including Students, Teachers, System Administrators, etc.
- Modifying all Authorized End User information
- Creating/removing all course web sites
- Building and managing all course web sites
- Customization to the site
- System usage tracking reports
- Deciding which product features will be available or unavailable, how much functionality instructors will be allowed, etc.
- Choosing icon themes
- All changes to the Blackboard-named URL. All Customers are assigned a URL such as http://institutionname.blackboard.com. The institution is allowed to pick the "institutionname". However, any re-directs to other URLs are the responsibility of Customer and not Blackboard. For example, if the Customer chooses the URL http://institutionname.org, Customer is responsible for the redirect to the http://insitutionname.blackboard.com site using a CNAME record.

c. **Building Blocks**. If Customer has implemented a Building Block into the Hosted Software or plans to a implement a Building Block, Customer must take the following steps before installing a Building Block on a production system: 1) apply and thoroughly test all Building Blocks in Customer's test/development environment prior to implementing the Building Block in the production environment; and 2) before requesting an update/upgrade to Blackboard on Customer's production environment, contact the vendor of the Building Block or check the Building Blocks Catalog to ensure that Customer has the latest version prior to upgrading Customer's Hosted Software. If an issue arises with Customer's Hosted Software, the Blackboard Managed Hosting Service support team will work with Customer to troubleshoot the problem. If the Blackboard Managed Hosting Service support team isolates the problem as related to one or several Building Blocks, the Blackboard Managed Hosting Service support team may disable the Building Block to further troubleshoot the issue or to restore overall service.

4. **SERVICE LEVELS**. The following Service Levels apply to the Services:

a. **Host Latency**:

The Managed Hosting Service provides a monthly average of two (2) seconds or better Host Latency. "**Host Latency**" is defined as the time period beginning when a request is received by the application host and ending when the request is completed by the application providing the Hosting Service. Latency measurements will not be measured during scheduled maintenance windows. Host Latency excludes any latency incurred on the Customer site or when traversing the internet between the Customer site and the application host. Upon Customer's request, Blackboard will provide a

report showing Host Latency for the preceding month. Failure to meet the Host Latency service level occurs when, during any calendar month, the average Host Latency for such calendar month is greater than two seconds. Service credits for failure to meet the Host Latency service level are as follows:

Service credits for failure to meet the Host Latency service level are as follows:

Time of Latency (per calendar month)	Service Credit
>2-4 Seconds Monthly Average Host Latency	2 days of service fees credited (i.e. 1/15* monthly fees)
>4-5 Seconds Monthly Average Host Latency	4 days of service fees credited (i.e. 2/15* monthly fees)
>5 Seconds Monthly Average Host Latency	8 days of services fees credited (i.e. 4/15* monthly fees)

In order to receive any service credit for Host Latency, Customer must notify Blackboard within seven (7) days from the time Customer becomes eligible to receive a service credit, which is the end of each calendar month. Failure to comply with this requirement will forfeit Customer's right to receive a service credit. In order to be eligible, Customer must be in compliance with the Agreement including the contracted Active User Capacity and storage quota.

b. **Availability**:

Standard Service Levels:

If Customer meets the following requirements, Customer shall automatically be entitled to 99.7% standard service levels.

a. Customer's Hosted Software on Learn Managed Hosted production environment is within the Fully Supported category as defined in the then-current Blackboard support guidelines;

b. Customer's usage is within contracted levels for Active User Capacity and storage; and

c. Any Building Blocks deployed on the production environment of the Hosted Software are compliant with the standard Managed Hosting Building Blocks Policy.

Blackboard shall use commercially reasonable efforts designed to ensure the Managed Hosting Services are Available twenty-four (24) hours a day, seven (7) days a week with a targeted uptime of 99.7% per calendar month. The Managed Hosting Services shall be considered "Available" unless and to the extent an Authorized End User cannot reasonably access the Managed Hosting Services other than as a result of (a) scheduled maintenance, (b) issues outside the reasonable control of Blackboard, (c) Force Majeure Events, or (d) third-party software integrations requested or deployed by Customer. Without limiting the foregoing, Blackboard reserves the right to allocate, limit or delay delivery of, or suspend access to the Managed Hosting Services, in whole or in part, where necessary or commercially appropriate, upon the occurrence of any situation or event (including without limitation, a Force Majeure Event) whereby the performance or operation of the Managed Hosting Services become overburdened or impaired, or their economic viability is otherwise affected, and during such period the service performance will not be part of the analysis of Availability.

If the Managed Hosting Services are Available less than 99.7% per calendar month, Customer will be eligible to receive service credits as outlined below. Our failure to satisfy a service level shall not be a breach of any Agreement and your sole and exclusive remedy in such event shall be these service credits.   In order to receive any service credit, Customer must notify Blackboard within seven (7) days from the time Customer becomes eligible to receive a service credit, which is the end of each calendar month. Failure to comply with this requirement will forfeit Customer's right to receive a service credit. In order to be eligible, Customer must be in compliance with the Agreement including the contracted Active User Capacity and storage quota. The aggregate maximum number of service credits to be issued by Blackboard to Customer for any and all downtime periods and performance problems during any given calendar month shall not exceed the fees for one month of service.

Length of Unavailability (per calendar month)	Service Credit
>0 to 4 aggregate hours below 99.7% Availability	1 day of service fees credited (i.e., 1/30* monthly fees)
>4 to 48 aggregate hours below 99.7% Availability	2 days of services fees credited (i.e., 1/15* monthly fees)
>48 to 96 aggregate hours below 99.7% Availability	5 days of service fees credited (i.e., 1/6* monthly fees)

*Each block of 96 hours below 99.7% Availability thereafter shall be credited 5 days of service fees.
*All service credits shall be applied to the next period's Managed Hosting fees.

Enhanced Service Levels (99.9%):

If Customer meets the following requirements, Customer shall automatically be entitled to 99.9% enhanced service levels. This means that the Availability of the Managed Hosting Services shall be calculated against a 99.9% targeted uptime rather than a 99.7% targeted uptime. All other provisions of the Standard Service Levels shall continue to apply.

a. Customer meets the requirements for Standard Service Levels set forth above;

b. Customer has Platinum Level Service or Diamond Level Service; and

    c.   Customer is currently subscribed to Integration and Customization Maintenance (ICM) Service from Blackboard Consulting for supporting any SIS integration between the Hosted Software and Customer's student information system ("SIS") that was completed by Blackboard Consulting.

The enhanced service levels described herein apply only to production environments and do not apply to Staging Environments.

<u>Enhanced Service Levels (99.8%)</u>:

If Customer meets the following requirements, Customer shall automatically be entitled to 99.8% enhanced service levels. This means that the Availability of the Managed Hosting Services shall be calculated against a 99.8% targeted uptime rather than a 99.7% targeted uptime. All other provisions of the Standard Service Levels shall continue to apply.

    a.   Customer meets the requirements for Standard Service Levels set forth above; and

    b.   Customer has Gold Level Service or Platinum Level Service or Diamond Level Service.

The enhanced service levels described herein apply only to production environments and do not apply to Staging Environments.

If Customer does not have Platinum Level Service (on Blackboard Platinum Package) or Diamond Level Service, the Availability/Service Credit does not apply to the 7 calendar day period following the installation of an application pack, update or upgrade on the production environment because of the lack of Blackboard's full control over the upgrade project management.

BLACKBOARD LEARN MANAGED HOSTING
TERMS, SPECIFICATIONS & SERVICE LEVELS

TERMS APPLICABLE TO BLACKBOARD BUSINESS CONTINUITY SERVICE (ADD-ON TO MANAGED HOSTING SERVICE)

Below are additional terms and conditions applicable to Customer's purchase of Business Continuity Services. Definitions used but not defined herein shall have the meanings ascribed to them in the Master Services Agreement or the applicable Order Form between Customer and Blackboard.

- The Business Continuity Service is a disaster recovery service provided by Blackboard via which Blackboard will cause the Hosted Software to come on line at an alternate processing location when Customer's primary managed hosting Service experiences a Disaster.
    a. Upon implementation of the Business Continuity Service, Blackboard will provide Customer with a detailed communications plan in the event of a Disaster.
    b. In the event of a Disaster, Blackboard will contact Customer and, if requested, use commercially reasonable efforts to bring up the backup site in accordance with the RTO and RPO. Except in the case of an Excusable Event, Blackboard will use commercially reasonable efforts to ensure that Customer's Authorized End Users can access the Hosted Software during the Disaster Period in substantially the same fashion as if no such Disaster had occurred or is occurring.
    c. Following the end of any Disaster Period, Blackboard will restore Customer's production site. Blackboard may, in its discretion, use the back-up site as Customer's new production site and use the site that experienced the just-ended Disaster as the back-up site for future Disasters.
    d. At Customer's request, Blackboard will make available a detailed data backup time and date report.
    e. If requested by Customer, Blackboard will also perform a disaster recovery test once a year at a time coordinated with Customer in order to ensure the readiness of the Business Continuity Service.
    f. In the case of an Excusable Event affecting the Disaster recovery site, Blackboard shall, during the period such Excusable Event is occurring, be temporarily relieved of its obligations to provide the Business Continuity Service and to meet the RPO and RTO. Blackboard shall resume provision of the Business Continuity Service as soon as reasonably practicable after cessation of the Excusable Event.
- Definitions:
    a. "**Disaster**" means an event or circumstance causing a catastrophic failure at or affecting the site at which the Hosted Software is hosted which causes the Hosted Software to be unavailable, including without limitation, acts or omissions of government or military authority, acts of God, materials shortages, transportation delays, fires, floods, labor disturbances, riots, wars, terrorist acts or inability to obtain any approval or authorization of any government authority.
    b. "**Disaster Period**" means the period during which a Disaster is occurring.
    c. "**Recovery Point Objective (RPO)**" means the maximum age of the most recent copy of the data. Unless separately agreed between Blackboard and Customer, the RPO for the Business Continuity Service is 12 hours.
    d. "**Recovery Time Objective (RTO)**" means the time it takes from Customer's notification of Blackboard of the loss of the business function of the primary hosting site to the time the Blackboard application becomes available to Authorized End Users. Unless separately agreed between Blackboard and Customer, the RTO for the Business Continuity Service is 24 hours.
- Service Credits:
    a. If Blackboard fails to meet the RTO and/or RPO, Blackboard will issue service credits to Customer to be applied against future Business Continuity Service fees. Such service credits shall be Customer's sole remedy for failure to meet the applicable RTO and/or RPO. In order to receive any service credit, Customer must notify Blackboard within seven (7) days from the time Customer becomes eligible to receive a service credit. Failure to comply with this requirement will forfeit Customer's right to receive a service credit. In order to be eligible, Customer must be in compliance with the Agreement including the contracted Active User Capacity and storage quota, if any.
    b. Possible service credits are as follows:

Length of Unavailability	Service Credit
Greater than 0 hours but less than or equal to 12 hours beyond the guaranteed RTO and/or RPO	50% of annual Business Continuity Service fees credited
Greater than 12 hours but less than or equal to 24 hours beyond the guaranteed RTO and/or RPO	75% of annual Business Continuity Service fees credited
Greater than 24 hours beyond the guaranteed RTO and/or RPO	100% of annual Business Continuity Service fees credited

    c. All service credits shall be applied to the next period's Business Continuity Service fees. Total service credits in any annual term are limited to the full amount of the annual Business Continuity Service fees.
    d. The service credits referred to herein shall be Customer's sole remedy, and Blackboard's sole obligation, with respect to failures of the Business Continuity Service to meet the technical specifications and performance parameters set forth herein. Blackboard does not warrant or guarantee the Business Continuity Service except as expressly stated herein.

BLACKBOARD LEARN MANAGED HOSTING PLANS

Following are the specifications applicable to available Blackboard Learn managed hosting plans:

+ Blackboard Learn Managed Hosting – Gold Engagement Plan:
- Includes:
  - Production Environment
  - 200GB of primary data storage (unless otherwise stated on the Order Form)
  - 8000 Active Users (unless otherwise stated on the Order Form)
  - 5 Mbps Bandwidth measured using the 95th percentile calculation (unless otherwise stated on the Order Form)
- Additional storage, bandwidth, and Active User capacity for each solution are separately charged

+ Blackboard Learn Managed Hosting – Platinum Engagement Plan:
- Includes:
  - Production Environment
  - Test Environment
  - Staging Environment (during major update periods, see below)
  - Platinum Project Manager (during major update periods, see below)
  - 500GB of primary data storage (unless otherwise stated on the Order Form)
  - 8000 Active Users (unless otherwise stated on the Order Form)
  - 20 Mbps Bandwidth measured using the 95th percentile calculation (unless otherwise stated on the Order Form)
- Additional storage, bandwidth, and Active User capacity for each solution are separately charged
- The Platinum Project Manager (PPM) is a proactive relationship manager whose primary goal is to manage technical change to the Customer's Learn Managed Hosting service during major updates. He/ she will provide a single point-of-contact at Blackboard for such updates.
- Business Objectives of the PPM:
  1. Management
     a. <u>Central Point of Contact and Escalation</u>: The PPM will be the central point-of-contact within Blackboard during the major update period, lasting no longer than three months per update with no more than two major updates during a year term.
     b. <u>Internal Blackboard Delivery Coordination</u>: Coordinate with Blackboard Consulting Project Management, Developers, Customer's technical support team, Cloud Operations, Engineering, and other elements of Blackboard to deliver and manage Customer's requirements during the update periods.
     c. <u>Infrastructure and Software Update Management</u>: Design and implement Managed Hosting environment testing and/or staging in coordination with Customer as necessary for testing and evaluation.
  2. Communication
     a. <u>Contact</u>: Available to authorized support contacts through a dedicated phone number/ email/ instant messenger (or other contact method) for day-to-day Managed Hosting environment update project status reporting.
     b. <u>Project Communication</u>: Build pro-active, two-way communication processes in coordination with Customer for update project management, support issue escalation during the update project period, and other communication procedures as necessary.
     c. <u>Regular Reporting</u>: Coordinate and facilitate regularly scheduled and ad-hoc project meetings related to the update project.
  3. Documentation
     a. <u>Update Project Planning and Regular Status Reporting</u>: Document update project plans with milestones, timelines, and resource requirements. Provide weekly updates to Customer on status of the project plan until the update has completed successfully with the Customer's approval for project closure.

+ Blackboard Learn Managed Hosting – Diamond 1 Engagement Plan:
- Includes:
  - Production Environment
  - Test Environment
  - Staging Environment
  - Service Delivery Team Resources – 10 hours average utilization per week
  - 500GB of primary data storage (unless otherwise stated on the Order Form)
  - 8000 Active Users (unless otherwise stated on the Order Form)
  - 20 Mbps Bandwidth measured using the 95th percentile calculation (unless otherwise stated on the Order Form)
- Additional storage, bandwidth, and Active User capacity for each solution are separately charged
- Service Delivery Team Resources
  - Service Delivery Team consists of Service Delivery Manager (SDM) and Service Delivery Engineer (SDE) resources dedicated to select Managed Hosting clients.
  - Includes monthly utilization of Service Delivery Team staff resources at an average of 10 hours per week.
  - Customer will receive (1) a named SDM resource assigned to Customer responsible for the management, communication and documentation responsibilities outlined below and (2) a named SDE resource for premium

level of support. The Service Delivery Team will provide monthly utilization report to Customer, providing aggregate team resource consumption time detail.

- o   Roles and responsibilities of the SDM will primarily fall under the following three objectives: management, communication and documentation.
    - A.   **Management** – Plan and project manage Customer's hosted infrastructure implementation, growth, and planned and reactive changes. To meet this objective, the SDM's tasks may include, but not be limited to, the following:
        - • Central Point of Contact and Escalation: The SDM will be the central point-of-contact within Blackboard Client Support and maintain day-to-day knowledge of all plans, activities, and status of projects and issues involving Customer's hosted environment and act as a coordinator within Blackboard for all operational and support issues on Blackboard products that Customer owns.
        - • Infrastructure Management: Plan and manage projects involving Customer's environment for scalability, optimal performance, and growth in coordination with Customer and all elements within Blackboard
        - • Internal Blackboard Delivery Coordination: Coordinate with Tier-1 Support Team, SDE resources, Cloud Operations and Engineering, Blackboard Consulting Project Management and other elements of Blackboard as needed to deliver and manage Customer's requirements
        - • Support Activities: Manage support activities with hosted Blackboard applications and infrastructure, leveraging Tier-1 team dedicated to Service Delivery Team and SDE resources, including but not limited to:
            - o   Direct oversight of ticket prioritization and escalation within Blackboard
            - o   Risk assessment of support activities focused on impact analysis and evaluation based on updates and upgrades
        - • Infrastructure and Software Update Management: Design and implement Hosting testing and/or staging environments in coordination with Customer as necessary for testing and evaluation purposes.
        - • Auditing: Regularly conduct systems audit and analysis on Customer's environment's performance and utilization for proactive monitoring, infrastructure management, forecasting and reporting purposes
        - • Customer Business Planning Integration: Keep master schedule of Customer's academic activities and key events/milestones. Communicate to entire Blackboard Team on critical events on the calendar.
    - B.   **Communication** - Build and execute business processes for communication and Customer support (with a special focus on providing transparency and visibility into the purchased services and change management). To meet this objective, the SDM's tasks may include, but not be limited to, the following:
        - a.   Contact: Be available to Customer's Systems Administrators and Operations staff through a dedicated phone number/email/instant messenger (or other contact method) for day-to-day Managed Hosting support requests and status reporting
        - b.   Project Communication: Build two-way communication processes in coordination with Customer for project management, support issue review and escalation, and other communication procedures as necessary
        - c.   Regular Reporting: Coordinate and facilitate regularly scheduled (weekly or monthly or quarterly) and ad-hoc project and status update meetings
        - d.   Channel Management: Modify and update communication processes and channels as deemed necessary
    - 2.   Documentation - Document and report on Customer's hosted environment, project status, escalation issues, and other Customer-owned Blackboard products. Complete and thorough documentation will be a key aspect of meeting the management and communications objectives of the Service Delivery Team. As such, the SDM will provide the following documents during the life of the relationship between the SDM and Customer:
- o   Operations and Plans: Develop detailed documents including escalation process, Operations Handbook, infrastructure overview and implementation plans
- o   Regular Status Reporting: Document and provide weekly reports on all project plans and updates, and post-meeting (conference calls) minutes to Customer
- o   Monthly Reporting: Document and provide monthly updated reports to Customer on items including but not limited to actual performance metrics against Service Level Agreement (SLA) requirements, monthly utilization rate of the Service Delivery Team resources, system utilization information and other relevant materials. Service Delivery Team will make best effort to customize the monthly reports per Customer's preferences.
- o   Change Management/Status (I): Provide timely and detailed reports of planned Managed Hosting environment changes; planned or unplanned service outages, or degradation of services; and issue resolution reports
- o   Change Management/Status (II): Document and communicate any procedural changes that regulate the flow of updates to the production Managed Hosting environment
- o   SLA Performance Reporting/Analysis: Specifically against contractual SLA requirements, provide monthly reports on system utilization and performance, including host latency graphs, user activities summaries, and systems performance analysis. Goal will be to develop, mutually with Customer, a standard set of reporting for overall systems performance and management.

+ Blackboard Learn Managed Hosting – Diamond 2 Engagement Plan:

Includes all features of Diamond 1 Engagement plan, with the addition of:
- Additional 10 hours/week of Service Deliver Team Resources for a total of 20 hours/week average utilization rate
- OpenDB Reporting Server Environment

+ Blackboard Learn Managed Hosting – Diamond 3 Engagement Plan:

Includes all features of Diamond 1 Engagement plan, with the addition of:
- Additional 20 hours/week of Service Delivery Team Resources for a total of 40 hours/week average utilization rate
- Annual system performance evaluation via a load testing exercise

BLACKBOARD LEARN MANAGED HOSTING ENVIRONMENT DETAILS

The following details apply to the environments available for the Learn managed hosting plans offered by Blackboard:

+ Blackboard Learn Managed Hosting Production Environment
- Production Environment
  - o Installation of Blackboard Learn software within Blackboard-managed production infrastructure scaled to support an average workload equal to licensed Active User capacity and data storage
  - o Subject to Latency and Availability Service Credits

+ Blackboard Learn Managed Hosting Staging Environment
- Non-Production Staging Environment
  - o Installation of Blackboard Learn software within Blackboard's production infrastructure
  - o Staging Environments are designed to allow Customer to test changes before applying them to the Production Environment. Staging Environments are not designed, recommended, or supported to deliver production workloads.
  - o The Staging Environment is not designed to fully replicate or clone the production environment in terms of infrastructure or overall capacity.
  - o On Customer's request, Blackboard will update the Staging Environment with a copy of data from the Production Environment up to four times per year, or for Platinum Engagement Plan customers as needed in direct support of system upgrade testing
  - o 99.7% Availability guarantee applies for all Staging Environments, except in the case of a disaster

+ Blackboard Learn Managed Hosting Test Environment

- Non-Production Test Environment
  - o Installation of Blackboard Learn software within Blackboard's non-production infrastructure scaled to support only a minimal workload and data storage capacity.
  - o Test Environments are designed to allow Customers to explore new Learn software and configuration settings in a non-production environment. They are not designed to replicate the Production Environment in terms of physical infrastructure or data set.
  - o This Non-Production Environment is not designed to fully replicate or clone the Production Environment infrastructure. Therefore, it does not necessarily meet all of the Service Level specifications, and does not qualify for Service Level guarantees or service credits

+ Blackboard Learn Managed Hosting OpenDB Reporting Server Environment

- Non-Production Open Database (OpenDB) Reporting Server
  - o The Production Environment database will be replicated to the OpenDB Reporting Server Environment daily, or at lesser frequency if requested by Customer
  - o OpenDB Reporting Server Environments are not designed or provisioned to be used for Production purposes
  - o Includes a single database account with read-only access to the full Learn OpenDB database schema. Access to operational areas of the Learn database may be restricted where required for security compliance.
  - o Access to the OpenDB environment will be limited by network restriction to a specific set of IP addresses provided by the Customer
  - o Content files submitted into the system (e.g. Word documents and PowerPoint files) are not cannot be queried
  - o This Non-Production Environment is not designed to fully replicate or clone the Production Environment infrastructure. Therefore, it does not necessarily meet all of the Service Level specifications, and does not qualify for Service Level guarantees or service credits