**Network Services**

**Academic Affairs**
**Administrative Unit Assessment**
**FY 18 (July 2017-July 2018)**

**Department and Assessment Report Information**

| Prepared on:7/31/2018 9:13:54 AM | By:tommy.davis@mga.edu |
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| For which department or area are you reporting? | Network Services |
| What is the name and MGA email address of the person responsible for this report? | Tommy Davis<br>tommy.davis@mga.edu |

**Departmental Mission and Goals**

The mission and goals of the department should be consistent over a 5 year period, although some institutional changes may necessitate and prompt a change in mission or goals for specific departments. In this section, you will report the mission statement for your department as well as the long term goals (5 year range) for the department.

| What is the mission statement for this department/area? Your mission should explain why the department/area exists and who it serves. | To provide reliable network and email services for all Middle Georgia State University faculty, staff, students, and guests. |
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| What are the goals for this department? These should be the "big things" the department/area intends to accomplish within 5 years. | 1. Provide continuous and reliable network functionality and modernization.<br>2. Provide continuous and reliable email functionality and modernization. |
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**Objectives**

Each year, every department should identify objectives the department hopes to accomplish in the next year. These should align with departmental goals and the MGA strategic plan. In the next section you will be reporting on the objectives you set and whether or not you achieved them in FY 18. Later in the document you will report on objectives you hope to accomplish in the coming fiscal year, FY19.

**Objective 1**

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| **Objective 1: What was this department's first objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.** | Increase the Macon campus to Eastman campus MetroE leased circuit from 100Mbps to 250Mbps. |
| **Objective 1: How did your department measure this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)** | The department measured this objective by simply completing the change over to the new circuit and using networking monitoring tools to track utilization levels for the circuit. |
| **Objective 1: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)** | The target outcome for this objective was to decrease bandwidth utilization from 100% average utilization during peak hours to below 70% average utilization during peak hours. |
| **Objective 1: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)** | The increase in circuit size reduced the average utilization during peak hours to 67%. |
| **Objective 1: Did your department meet this objective?** | The department met this objective. |
| **Objective 1: What did your department learn from working toward this objective? What changes will you make based on this effort next year?** | This objective, in coordination the Georgia Technology Administration (GTA), took 4 attempts to achieve, hence we learned to be extremely persistent when trying to implement our goals. In the future we will be more methodical when working with outside entities. |

**Objective 2**

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| **Objective 2: What was this department's second objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.** | Install a new traffic shaping device to increase functionality and usability for the entire network. |
| **Objective 2: How did your department measure this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)** | The department measured this objective by installing and configuring a device called a Net Equalizer and using networking monitoring tools to track utilization levels for our core network and testing Internet video (Netflix) streaming capabilities at all campuses on common computers and smartphones with various faculty, staff, and students. |
| **Objective 2: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)** | There were two target outcomes for this objective. The first was to decrease core bandwidth utilization from 100% average utilization during peak hours to below 95% average utilization during peak hours and the second was to provide reliable (non-buffering) Internet video streaming at 4 Mb/s for high-def video at all campuses. |
| **Objective 2: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)** | The installation of the Net Equalizer device decreased the core network average utilization during peak hours to 95%. Video streaming tests confirm acceptable (non-buffered) playback at 4 Mb/s for high-def video at all campuses. |
| **Objective 2: Did your department meet this objective?** | The department met this objective. |
| **Objective 2: What did your department learn from working toward this objective? What changes will you make based on this effort next year?** | This objective was straight forward because of the valuable help the vender provided with the initial setup of the device. No changes will be made based on this effort next year. |

**Objective 3**

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| **Objective 3: What was this department's third objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.** | Install Active Directory Federated Services (ADFS) for single sign on capability for various applications. |
| **Objective 3: How did your department measure this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)** | The department measured this objective by simply implementing ADFS and configuring the system to provide successful single sign on capability for multiple applications. |
| **Objective 3: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)** | The target outcome for this objective was to provide single sign on capability for at least 3 applications. |
| **Objective 3: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)** | The implementation of ADFS has allowed the network office to provide single sign on capabilities for 12 various applications including Microsoft Office 365 Identity Platform, Human Capital Management - DEV, Human Capital Management - PROD, Device Registration Services, Alma-ExLibris, Primo-Galileo, cm.maxient.com, KDEV, XTEST, D2L, Ethos Identity, and Ethos Test Identity. |
| **Objective 3: Did your department meet this objective?** | The department exceeded this objective. |
| **Objective 3: What did your department learn from working toward this objective? What changes will you make based on this effort next year?** | The first thing we learned was that we will have to implement an SQL database to accommodate future growth. The second thing we learned was that we will need to upgrade MS Active Directory to provide multi-factor authentication. |

**Objective 4**

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| **Objective 4: What was this department's fourth objective for this fiscal year? Objectives should be specific, measurable, and achievable within one year.** | To provide routine upgrades and maintenance for all network and email systems. |
| **Objective 4: How did your department measure this objective? (Survey, budget number, number of participants, jobs completed, measurable time and/or effort)** | The department measured this system by upgrading the internal server backup network to provide increased server backup efficiency and by implementing increased functionality within the Office 365 email system. Standard routine maintenance is also performed to keep all systems up to date and operational. |
| **Objective 4: What was your target outcome for this objective? (1.e. 80% participation, 5% enrollment growth, 7% change in engagement)** | The target outcome for the first objective of increasing back network efficiency was to increase network speeds from 1Gbps to 10Gbps. The second target outcome of implementing increase functionality within the Office 365 system was to provide increased security by implementing multi factor authentication (MFA). |
| **Objective 4: At what level did the department/area achieve on this objective? (This should be a number, i.e. 82%, 6%, 345 attendees, 75% engagement)** | Increasing backup network efficiency was achieved by a factor of 10 by replacing 1Gbps switches with 10Gbps switches and by using non-blocking wire-speed switches instead of potentially blocked switches. Increased Office 365 functionality was successfully achieved by providing multi factor authentication. |
| **Objective 4: Did your department meet this objective?** | The department exceeded this objective. |
| **Objective 4: What did your department learn from working toward this objective? What changes will you make based on this effort next year?** | The department learned that increasing network efficiency is relatively straightforward to implement because it is based on financial constraints however, implementing new features within Office 365 seems to be more automatic and becomes more of a containment effort to keep the new features to a manageable level. |

**Future Plans**

| Please identify at least four measurable objectives for the next fiscal year. In listing the objectives, please use the format shown in these examples.1) The Department of X will improve services levels by 5% as measured by our satisfaction survey. 2) The department to X will provide training in ABC for at least 73 MGA faculty and staff. | 1. The department of Network Services will upgrade the external Domain Naming System (DNS) for use by all faculty, staff, students, and guests.<br>2. The department of Network Services will upgrade the MS Active Directory (AD) for use by all faculty, staff, and students.<br>3. The department of Network Services will upgrade the internal MS Active Directory Federated Services (ADFS) for all faculty, staff, and students.<br>4. The department of Network Services will continue to upgrade the network and email system systems for all faculty, staff, and students. |
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| Based on this assessment, please share your thoughts on the current status and future direction of this department or area. | The department of Network Services is in a good position both currently and in the future to fulfill our departmental mission. |

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