This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)

3. Employee Identification Number

4. Civil Service Position Code Description
INFO TECH SPECIALIST-4

5. Working Title (What the agency calls the position)
Virtual Environment / Hardware Specialist

6. Name and Position Code Description of Direct Supervisor
RUOFF, JASON E; STATE ADMINISTRATIVE MANAGER-1

7. Name and Position Code Description of Second Level Supervisor
SCHAFER, SCOTT G; STATE DIVISION ADMINISTRATOR

8. Department/Agency
LEO-MSF-MEDC

9. Bureau (Institution, Board, or Commission)
Information Services

10. Division
Infrastructure Services

11. Section
Data Center Services

12. Unit

13. Work Location (City and Address)/Hours of Work
300 N. Washington Sq Lansing, MI 48913 / Mon-Fri 8am-5pm

14. General Summary of Function/Purpose of Position

This position will be the MEDC Virtual Environment Specialist. This position will be solely responsible for the complex tasks of implementing, patching and maintaining the Virtual Host servers and VMware software; recommending the hardware to be used for and then maintaining the SAN housing the virtual servers; planning for space requirements and acquisition of additional SAN storage as needed, and ensuring that backup of all servers and hardware is successful and restorable.

As a member of the Data Center Team, this position will assist in the planning, analysis, design, development, testing, quality assurance, configuration, installation, implementation, integration, and maintenance of a variety of server hardware, server operating systems, backup/recovery systems, server data storage devices and enterprise services such as e-mail filtering, directory services and enterprise monitoring. This will include server replacement, upgrading server applications, researching data center project procedures, and preparing project documentation. This position will provide lead technical support to the IS Help Desk staff for complex hardware issues, as needed.
15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty. List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

<table>
<thead>
<tr>
<th>Duty 1</th>
<th>General Summary:</th>
<th>Percentage: 25</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Sole responsibility for the management of the Data Center hardware: this includes servers, SAN, HCI, NAS, and APC Power StruXure.</td>
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<tr>
<td><strong>Individual tasks related to the duty:</strong></td>
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<tr>
<td>• Ensure that all hardware is properly maintained by utilizing monitoring software that is upgraded to current versions and emails alerts of failures and imminent failures.</td>
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<tr>
<td>• Maintain firmware on all hardware to current levels</td>
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<tr>
<td>• Monitor disk usage, processor capacity, and memory utilization and ensure proper upgrades occur as needed</td>
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<td>• Plan for hardware replacements for aged equipment and ensure that replacement impacts are minimal and well-communicated</td>
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<tr>
<td>• Recommend appropriate replacement hardware as needed</td>
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<tr>
<td>• Work with vendors to ensure that hardware is properly maintained by securing maintenance quotes, following up on purchased preventative maintenance, and hardware failures are repaired with maintenance contract time limits.</td>
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<tr>
<td>• Make recommendations about hardware to be used for laptop and desktop environments</td>
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<tr>
<td>• Maintain / create documentation needed for Data Center management / maintenance</td>
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<tr>
<th>Duty 2</th>
<th>General Summary:</th>
<th>Percentage: 25</th>
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<tr>
<td></td>
<td>Sole responsibility for the management of the VMware virtualization environment.</td>
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<tr>
<td><strong>Individual tasks related to the duty:</strong></td>
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<td></td>
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<tr>
<td>• Ensure that VMware is upgraded and patched as needed</td>
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<td>• Create and remove virtual servers as needed</td>
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<td></td>
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<tr>
<td>• Secure appropriate hardware to accommodate VMware needs as required</td>
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<td></td>
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<tr>
<td>• Maintain / create documentation needed for Virtual Environment management / maintenance</td>
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<tr>
<th>Duty 3</th>
<th>General Summary:</th>
<th>Percentage: 20</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Resident expert on Microsoft Operating Systems and Microsoft Networking.</td>
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<td><strong>Individual tasks related to the duty:</strong></td>
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<tr>
<td>• Maintain DNS public and private records</td>
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<tr>
<td>• Maintain Domain Controllers with appropriate software versions</td>
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<td></td>
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<tr>
<td>• Ensure that Trusted Domains are providing necessary availability between .org and .gov domains</td>
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<tr>
<td>• Ensure that .org domain is available for Office 365 and MEDC staff</td>
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<tr>
<td>• Maintain MEDC group policies and provide changes as needed</td>
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| Duty 4 | | |
|--------| | |
### Duty 1

**General Summary:**

Manage the administration of cloud technologies and services.

**Percentage:** 20

**Individual tasks related to the duty:**

- Keep the Client Technology Services team aware of any administration changes that impact account management responsibilities
- Troubleshoot complex DNS, Trusted Domain, connectivity issues that arise
- Keep management aware of defined outages, notices of upgrades to applications and make recommendations for communications and strategies for working through outages and upgrades
- Manage the Office 365 environment
- Manage the Azure instance
- Procure and renew website domain hosting for the organization

### Duty 5

**General Summary:**

Sole responsibility for Data Center data backup, restoration and disaster recovery.

**Percentage:** 10

**Individual tasks related to the duty:**

- Ensure that data backup schemes execute successfully
- Test data restoration
- Upgrade backup software and hardware as needed
- Maintain the disaster recovery environment
- Test the disaster recovery environment

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Recommending the hardware to be used for and then maintaining the SAN housing the virtual servers; planning for space requirements and acquisition of additional SAN storage as needed and ensuring that backup of all servers and hardware is successful and restorable. Recommending the software needed for the creation and management of virtual desktops.

This position will make decisions about what hardware to purchase to house MEDC data, when to implement new Office 365 offerings, when to obtain quotes for data maintenance, how to purpose MEDC hardware to optimize efficiency.

17. Describe the types of decisions that require the supervisor’s review.

This position works closely with management on decisions of work priorities, expending money, resolving project scheduling conflicts, and major changes to hardware.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job?

This position, on occasion, will setup Data Center hardware, move servers that weigh 40 to 50 pounds, climb stepladders, and crawl under desks. Standard office conditions exist. Data Center is kept at 65F.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position’s responsibilities for the above-listed employees includes the following (check as many as apply):
22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?
Yes.

23. What are the essential functions of this position?
This position will be solely responsible for defining hardware specifications and maintaining the VMware environment for servers. This person will be an expert in Microsoft Networking.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.
Minor updates. Added management of cloud technologies beyond Office 365. MEDC now has a disaster recovery environment so the maintenance of this was added to one of the duties.

25. What is the function of the work area and how does this position fit into that function?
The Data Center team is responsible for maintaining all Data Center functionality within the MEDC. This includes managing the network infrastructure – Cisco switches, routers, firewalls; maintaining the hardware used for data storage and running applications – file and print servers, domain controllers, Exchange, Cisco FirePower, SEP, FMP, and more; and ensuring that all data is backed up and restorable. This position will be responsible for maintaining the servers - physical and virtual; providing network authentication using Microsoft Active Directory and all of the pieces associated with that; and finally backing up and restoring data.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:
Possession of a bachelor's degree with at least 21 semester (32 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

Educational level typically acquired through completion of high school and three years of experience as an application programmer, computer operator, or information technology technician may be substituted for the education requirement.

EXPERIENCE:

Information Technology Specialist 14 - 15
Three years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11 or one year equivalent to an Information Technology Infrastructure or Programmer/Analyst 12.

Prefer one year of experience in managing a Virtual Environment using VMware – vSphere.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of personal computers and personal computer software and their capabilities Knowledge of Microsoft Active Directory and DNS Management

Excellent technical problem solving and analytical skills

Ability to prepare detailed written instructions and documentation Ability to analyze instructions and data

Ability to gather and analyze facts, define problems and devise solutions

Ability to conduct interviews and establish and maintain effective relationships with systems users
CERTIFICATES, LICENSES, REGISTRATIONS:

VMware certification desired but not required
Microsoft server certification desired but not required

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor ___________________________ Date ___________________________

I certify that the entries on these pages are accurate and complete.

MARKIE JUSTICE ___________________________ 2/26/2020

Appointing Authority ___________________________ Date ___________________________

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee ___________________________ Date ___________________________

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.
None.