

OFFICE OF TEACHING AND LEADING

This item references Goal 4 of the *Mississippi Board of Education 2018-2022 Strategic Plan*.

Recommendation: Approval

Back-up material attached

Statement of Work for Mississippi Department of Education

Avaya Aura Experience Portal Application Installation

Proposal Date: July 27, 2021

Opportunity #: 632667

Presented to: MS Dept of Education

Presented by: Jean Elaine Ellis

Architected by: Jeremy Folsom

Document Control

<u>REVISIONS</u>			
<u>Ver#</u>	<u>Date</u>	<u>Author</u>	<u>Comments</u>
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Important Notice

The following statement of work from Carousel Industries of North America, Inc.:

- Is proprietary to Carousel Industries of North America, Inc (Carousel). This material is present for the purpose of evaluating services and may not be disclosed in any manner to anyone other than the addressee and employees or authorized representative.
- Is an scope based on Carousel's understanding of project requirements at the time of this document submission.

All assumptions inherent in this document are based upon the nature of project requirements and goals presented to representatives of Carousel Industries of North America, Inc.

Section 1: Executive Summary

Project Objectives

The Mississippi Department of Education (MDE) provides resources and technical support to Mississippi's public school system. The department also functions as a resource for federal education requirements and funding.

MDE currently uses the Avaya Aura R7.1.3 solution provided by Mississippi Department of Information Technology Services (ITS). It is a fully redundant solution across multiple data centers and support most of the State of Mississippi Departments and agencies. ITS has an Avaya Aura Experience Portal R8 solution across two data centers. It will be able to support multiple departments and agencies for Interactive Voice Response (IVR) purposes.

Section 2: Solution Overview

STATE OF MS - DEPT. OF EDUCATION (MDE) currently handles around 30,000 calls per month from callers wanting to obtain an update on Educator Status which are handled by agents. To reduce the impact of these calls on the call center the Department of Education is looking to provide a self-service option using an existing Avaya Experience Portal.

All backend connectivity will be via web services to STATE OF MS - DEPT. OF EDUCATION's CRM.

Swampfox will deploy the application to a DR AEP and ensure it can take calls. Failover testing is not included.

User input via DTMF (telephone key presses) will be supported. Barge-in will be supported as specified in the user interface specification delivered during the design phase.

The application will not support ASR (Automatic Speech Recognition) or TTS (Text-To-Speech).

This application will provide US English prompts for information and will provide status information in US English.

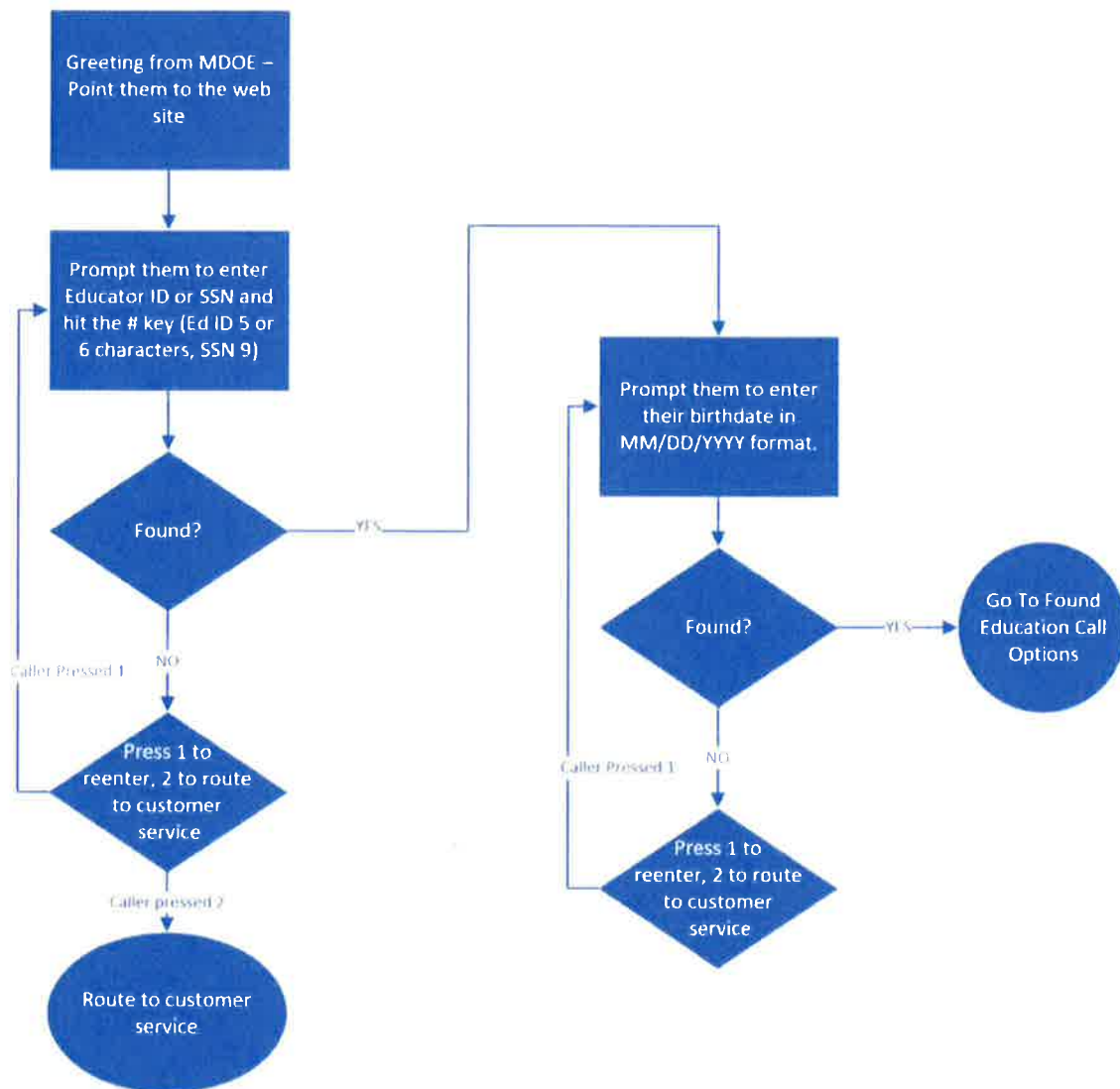
Prompts will be provided by Swampfox and the cost associated with acquiring professionally recorded prompts in US English is included in this SOW. Up to two recording sessions are included.

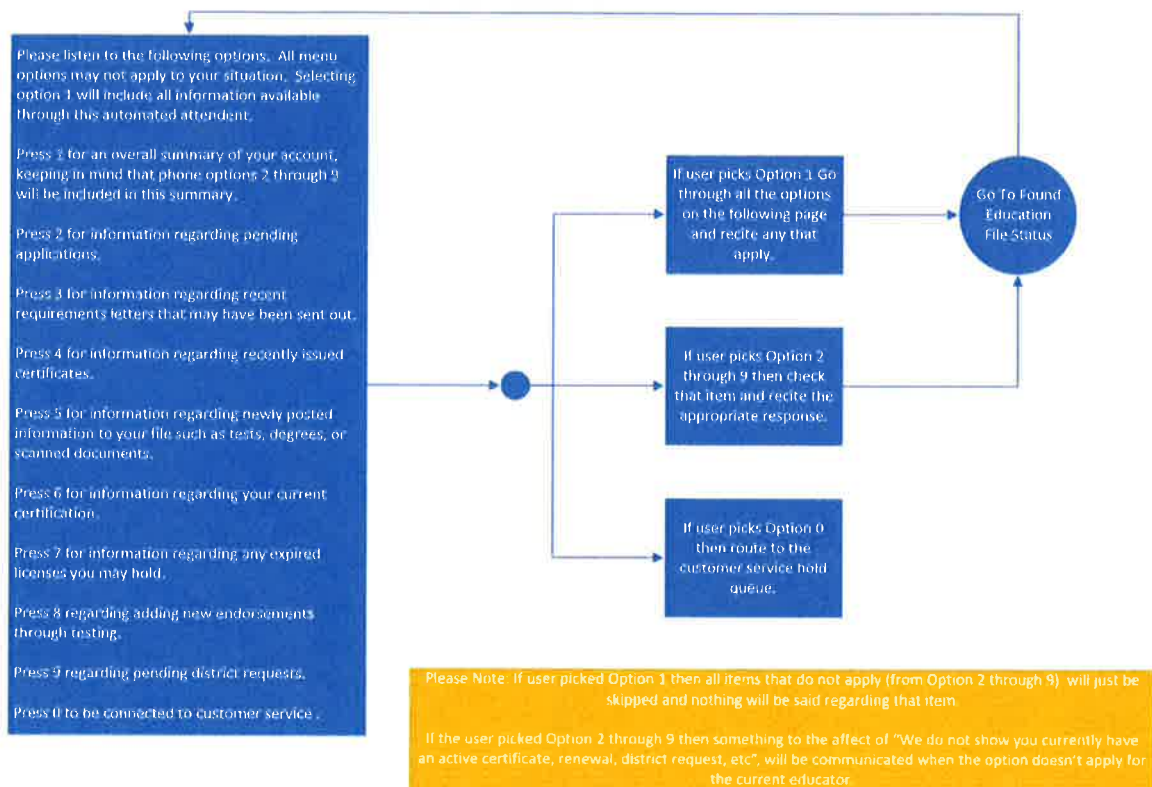
A configuration file will be included for application parameters – it is Swampfox policy to never hardcode application parameters whenever possible. This will be provided by leveraging Experience Portal "application variables" such that this will be incorporated into the EPM. Items administered include items such as

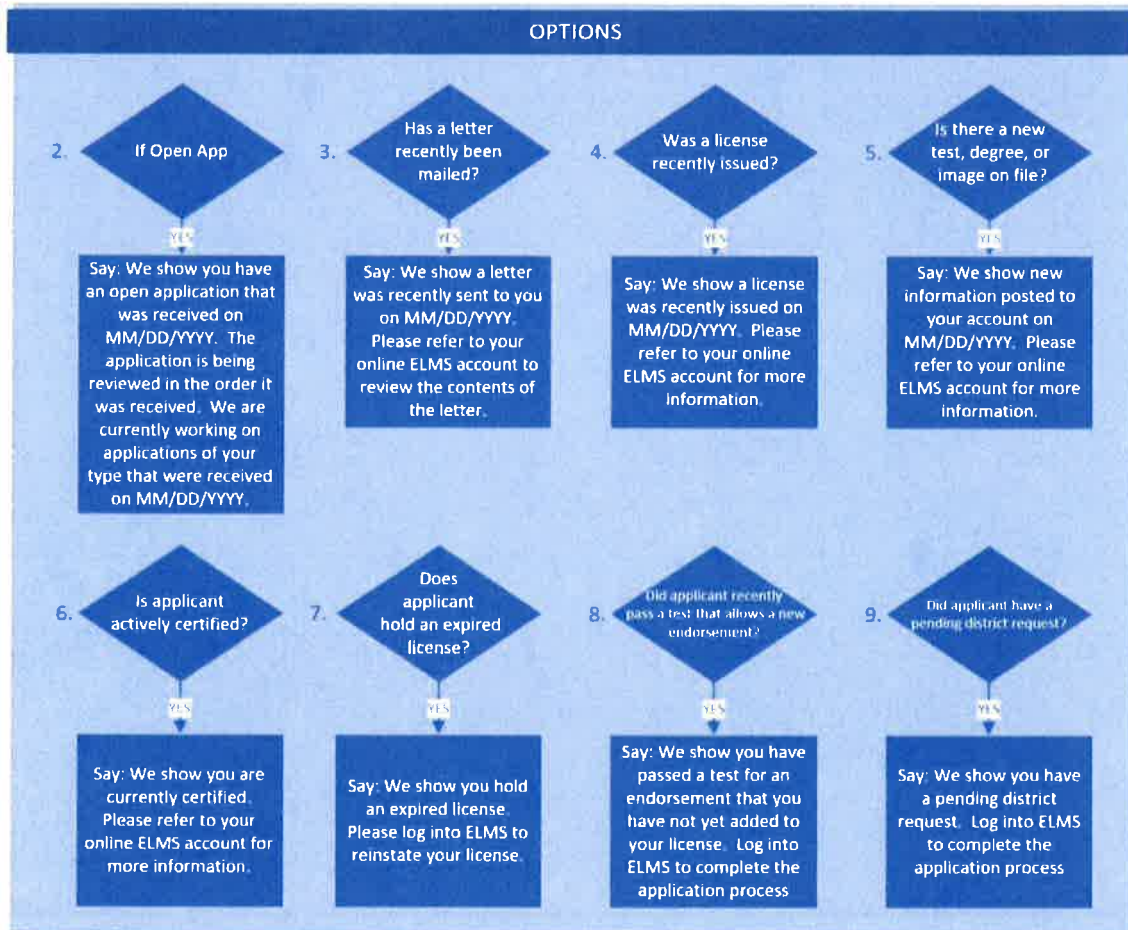
- Optional feature enablement
- Transfer VDNs
- Etc.

Call Flow

The high level call flow for the Educator Status application is as follows:





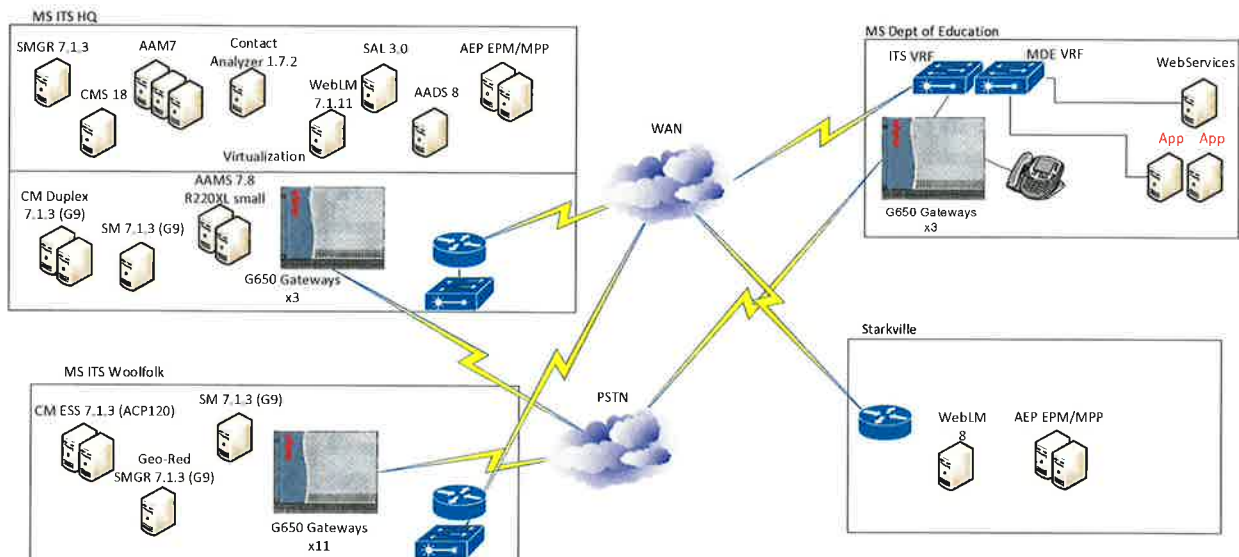


Reports

As part of this project a collection of reports will be available to State of MS which detail platform as well as application utilization. The solution will allow a custom report to be created on demand as well as it will be configured to automatically send selected personnel specific reports on a periodic basis – via email in .pdf, .csv, or .xls form. Swampfox will work with the customer to understand the type of data they would like to see reported and Swampfox will expose that data, not only in report form, but also as logged data in a database so that customer-internal reporting tools may be used to leverage this as required. The reports which are available are those which can be generated using Experience Portal's built-in reporting capabilities. This SOW does include instrumenting the application to report notable events to the Experience Portal system such as number of calls by status, but it does not include creating a customer reporting system.

Network Diagram

State of Mississippi Information Technology Services



Section 3: Description of Services

Carousel Industries will perform the following services and activities described below. These services, activities, and responsibilities characterize the full set of installation deliverables for this project, thus constitutes a working agreement between Carousel Industries and Mississippi Department of Education.

The price for the services provided in this SOW is \$54,475.00.

- This quote is for a multi-site project as described in this scope of work. Only adjuncts and applications listed in this SOW will be supported.
- Any services not listed, or time required in addition to quantities listed will be chargeable via Change Order.
- Carousel Industries will designate a remote Project Manager (PM) to this project as the single point of contact (SPOC) for all issues related to solution implementation.
- The scope of this project will be delivered in a single phase manner. As a single phase project, all work will be scheduled and completed in a continuous manner without anticipated time gaps or intervals between project start and completion. Any changes to the delivery methodology of the work described in this SOW must be approved in advance by the Carousel Industries Project Manager and may be subject to additional charges via Change Order.

- All labor that may be service-impacting, such as the cutover, will be done during off-hours M-F or Saturday. Any changes that require Sunday or holiday labor will be added via Change Order.
- Carousel Industries' PM will remotely perform work activities.

Section 4: Dept of Education Responsibilities

- MDE will provide a single point of contact to work with the assigned Carousel Industries Project Manager.
- MDE will provide VMware and OS for Application servers.
- MDE will be required to provide high speed remote access via Virtual Private Network (VPN). Alternate access or reduced access speeds require approval from the Carousel project team and may incur additional costs via change order.
- MDE will be responsible for any Carrier Services coordination or changes that may be required as part of the delivery of this solution.
- MDE will be responsible for ongoing patching and maintenance of the Application servers in their VMware environment. This includes possible future patching to ensure that the Application servers are running compatible versions of the application with the ITS hosted Experience Portal solution.

Section 5: Assumptions

- All Experience Portal Application Server hardware/software will be provided by STATE OF MS – DEPT. OF EDUCATION.
- If the servers are virtual, STATE OF MS – DEPT. OF EDUCATION will create VMs for the Application servers.
- STATE OF MS – DEPT. OF EDUCATION will provide and install the operating systems on any STATE OF MS – DEPT. OF EDUCATION provided/created servers/VMs except for the AEP and WebLM servers which have an OVA.
- STATE OF MS – ITS is responsible to ensure sufficient bandwidth is available for VoIP traffic between the Avaya Communication Manager / Session Manager and the AEP MPP servers.
- The AEP will use SIP trunks for communication with the CM and SM.
- Communication from the State's Enterprise Avaya PBX and related servers will take place over the existing enterprise VPN tunnel between ITS and MDE. Additional IP addresses and ports will need to be allowed on this tunnel for this new traffic and through the MDE firewall.
- Swampfox is not responsible for any PBX/Switch/telephony provisioning or configuration. Carousel Industries will perform CM and SM programming required to send calls to the AEP.
- STATE OF MS - DEPT. OF EDUCATION will provide documentation and Web Services. STATE OF MS - DEPT. OF EDUCATION shall provide access and open firewall ports as required.
- Swampfox will provide all newly recorded professional prompts in English for the initial installation – voice talent selections will be provided to STATE OF MS - DEPT. OF EDUCATION during the Design Phase.
- The application will accept DTMF input. Speech recognition is not included.
- After the project is contracted for, any changes will require a Change Request which may require additional charges.
- Software used by Swampfox is the Intellectual Property of Swampfox Technologies Inc. It may not be copied or distributed to others. Swampfox is providing a license to STATE OF MS - DEPT. OF EDUCATION to use the software in the conduct of its business.

- STATE OF MS - DEPT. OF EDUCATION will be responsible for testing and approving the functionality of the application before it is put into production.
- AEP standard reports on calls received by the application will be available. A custom report is included which STATE OF MS - DEPT. OF EDUCATION may specify which data elements should be included.
- STATE OF MS - ITS and DEPT. OF EDUCATION will provide VPN access and administrator login ids/passwords to Swampfox for remote access to the EPM, MPP, WebLM, Application servers.
- Does not include any screen pop client/application

VMware Requirements

Application Server Virtual Machine resource requirements

Application servers are required to be installed on a separate VM and cannot co-reside with any other software. Below are the recommended **minimum** VM specs.

VMware resource Value

CPU 4 core, FIL requires 8 core

vCPU reservation 2400 MHz

Memory reservation 16 GB, FIL requires 32 GB

Storage reservation 250 GB

Shared NICs 1 Gb or more

Application Server OS requirements (64 bit)

RHEL 7.x

CentOS 7.x

Windows Server 2016 or 2019

Server Port Mapping

Below is an example of typical ports that need to be opened. The exact list will be determined during the design phase.

Server/system 1	Server/system 2	Port	Protocol	Direction	Purpose
EPM	Any Administrator	22	TCP	In	Secure Shell remote access to console
EPM	Any Administrator	80, 443	TCP	In	For AEP administration
EPM	Any Administrator	5432	TCP	In	For access to Postgres database for custom reports
EPM	Application servers	80, 443	TCP	In	For access to EPM Apache web server
EPM	MPP	443	TCP	In/Out	For access to EPM and MPP Apache web servers
EPM	MPP	123	UDP	In/Out	For Network Time Protocol to synchronize time
EPM	MPP	9443	TCP	In/Out	For MPP status polling and call detail
EPM	WebLM	8080, 8443, 52233	TCP	Out	For license polling
EPM	SMTP mail server	25	TCP	Out	To send reports by email

MPP	Any Administrator	22	TCP	In	Secure Shell remote access to console
MPP	Application servers	80, 443, 7080, 8080, 9080	TCP	Out	VXML and CCXML requests for document pages
MPP	Application Servers and EPM	10443	TCP	In/Out	For handling basic HTTP events
Application servers	Any Administrator	22	TCP	In	Secure Shell remote access to console
Application servers	WebLM server	8080, 8443, 52233	TCP	Out	For license polling
Application servers	WebLM server	80, 443	TCP	Out	For license polling
Application servers	SMTP mail server	25	TCP	Out	To send email for OCM campaigns, reports and alarm notifications
Application servers	Application servers	7080, 9080	TCP	In/Out	VXML/CCXML pages

Section 6: Signature Acceptance

Carousel will accept this SOW upon receipt of Customer's signature on this SOW along with a purchase order for the Services and the estimated travel and living expenses set forth in pricing section if applicable.

By signing this SOW customer accepts this SOW as a binding agreement with Carousel and agrees to abide by and accept the terms and conditions set forth herein.

Should there be any conflict between the Master Agreement executed between the State of Mississippi and Carousel Industries on August 29, 2017 and this Statement of Work, the Master Agreement shall prevail.

State of Mississippi, Department of Information
Technology Services, on behalf of Mississippi
Department of Education

By: _____
Authorized Signature

Printed Name: David C. Johnson

Title: Executive Director

Date: _____

Carousel Industries, Inc.

By: Jean Elaine Ellis
Authorized Signature

Printed Name: Jean Elaine Ellis

Title: Account Manager

Date: 7-27-21

Appendix – Application Support

Application Support Overview

Application Support provides customer assistance from Swampfox should the installed Swampfox application fail to function as designed. Root causes of such failure could be application errors not caught during the testing or acceptance phase of the project or could be due to an external component failure (e.g. Experience Portal platform issue, external customer database issue, changes in customer routing logic in their network switches, etc.).

Application Support includes updates to the application development to accommodate “platform” (e.g. Experience Portal/AAEP, Communication Manager, , etc.) changes as a result of new releases or platform fixes from Avaya.

While under support, Swampfox retains the most recent copy of the application source code in their active source code repository, as well as in an off-site storage facility. The most recent copy will always be available for changes while the customer is under an Application Support agreement.

Support Hours

You have selected 24x7 support. 24 x7 support is available 24 hours a day, 7 days a week for the duration of the contract.

On-Site/Remote Support

Swampfox expects to support STATE OF MS - DEPT. OF EDUCATION remotely. To provide this support, Swampfox will need access to a limited set of STATE OF MS - DEPT. OF EDUCATION systems at the customer site. This is typically provided via a Virtual Private Network.

Should Swampfox personnel need to travel to perform a service, the ‘after hours’ rate will be used while working and all T&E will be charged to Carousel Industries per Carousel Industries’ T&E guidelines. Swampfox will not charge for any time spent while in transit.

Projects Covered in this Support Agreement

The following projects encompass the extent of what is covered in this SOW.

- This support fee covers the following project(s);
 - Custom Menu and Policy application
 -

Product	Period Start Date	Period End Date	Business Hours or 24x7
- Custom Educator Status	2 weeks after go live	TBD	24x7

This proposal is valid for 90 days from the proposal date.

STATE OF MS - DEPT. OF EDUCATION Responsibilities

STATE OF MS - DEPT. OF EDUCATION is responsible for the following:

- Security of the system: product administration to prevent unauthorized use is STATE OF MS - DEPT. OF EDUCATION's responsibility. STATE OF MS - DEPT. OF EDUCATION system administrator should read all documents provided with this product to fully understand the features available that reduce risk of incurring charges for unlicensed use of Swampfox products.
- If STATE OF MS - DEPT. OF EDUCATION has requested a Severity 1 – Critical status for an issue, a customer contact must be available at all times to work with Swampfox Support in the resolution of the issue
- If STATE OF MS - DEPT. OF EDUCATION has requested a Severity 2 – High status for an issue, a customer contact must be available at all times to work with Swampfox Support in the resolution of the issue
- STATE OF MS - DEPT. OF EDUCATION must be willing to work with Swampfox Support representative to resolve the issue
- STATE OF MS - DEPT. OF EDUCATION must be able to transfer information (log files, configuration files, Linux core files) electronically to help Swampfox analyze the issue
- STATE OF MS - DEPT. OF EDUCATION must report each issue separately so they can be individually tracked to a successful resolution.
- STATE OF MS - DEPT. OF EDUCATION must be able to provide an accurate description of the issue and its business impact
- STATE OF MS - DEPT. OF EDUCATION must have a complete understanding of the technical infrastructure in which the Swampfox product is installed

Problem Reporting

Problems can be reported to Swampfox Support by visiting our support website at support.swampfoxinc.com or by phone at 803-451-4542. Website submittal is encouraged.

Submitting supporting documentation is encouraged, and Swampfox provides different mechanisms to submit data – FTP access (for large files/data dumps) or attaching file on support request; and escalation contacts.

For customers with 24x7 Application Support, after hours support requests that are submitted as "High" or "Critical" Severity are routed 24x7x365 to a support engineer on call. All other support requests will receive a call back on the next business day.

Incident Classification and Service Levels

When an issue is reported, its classification determines the urgency which should be associated with the incident. Though response times may not differ between each of these severities, internal escalation and resolution plans among urgency levels may differ.

The following Service Levels are supported:

Severity	Description	Initial Response Time (Business Hours)	Initial Response Time (After Hours)
1 - Critical	<ul style="list-style-type: none"> • All features are inoperable -- exhibited in a system crash or major hardware failure • Service is typically unavailable in the field • Work around is not available 	Less than ten (10) minutes	Less than twenty (20) minutes
2 – HIGH – Major Trouble	<ul style="list-style-type: none"> • One or more features of the application are not operating • Impact is being strongly felt in the field 	Less than thirty (30) minutes	Less than one (1) hour
3 – Low – Minor Trouble	<ul style="list-style-type: none"> • A minor feature of the system is not operating • Potentially service affecting but is more of an annoyance than a serious disruption 	Less than one (1) hour	Next business day
4 – RFC - Moves/Adds/Changes	<ul style="list-style-type: none"> • Not service impacting • Request for general feature information or enhancement • Non-maintenance support request 	Less than two (2) hours	Next business day



State of Mississippi - Department of Education IVR Application

Created By: Jean Elaine Ellis
Created Date: 07/29/2021
* Pricing is based on State of MS RFP 3983

ASD Parts List

Qty	Part Number	Description	MPG	Unit APL Price	Ext APL Price	Discount	Cust Unit Price	Cust Ext Price	Location
1	185446	AVAYA COMMUNICATIONS SOLUTION	1Z	\$0.00	\$0.00	0.00%	\$0.00	\$0.00	Jackson MS
1	197266	SELF SERVICE ADDITION MODEL	7P						Jackson MS
Product Total					\$0.00			\$0.00	
Carousel Installation and Professional Services								\$54,475.00	
(See Assumptions Below)									
Equipment and Installation								\$54,475.00	
Annual Support for the Application (Year 1 - 3)								\$26,559.00	
- \$8,853 each year									

Assumptions

MS DOE will provide an Application server for the application.
The State of Mississippi has an existing Avaya Experience Portal system.
Application will accept touch tone input. Speech recognition is not included.
Carousel will provide professionally recorded prompts in English.
AEP standard reports will be available. Custom reports are not included.
Transfers to agents will not include CTI screen pops.
MS DOE will provide a web service that provides educator information