

# **Beneficiary Travel Self-Service System (BTSSS)**

## **Jaws Users Job Aid for BTSSS**



**January November 2019**

**Version 1.0**

**Department of Veterans Affairs**

# 1. Introduction

This Job Aid provides guidance on accessing specific features for limited fine motor control or limited reach and strength users of JAWS screen reader. The goal is to provide a better understanding of the issues that affect the accessibility of these specific features by highlighting important observations and presenting suggested workarounds. Specific instructions in this document refer to JAWS and screen reader keystrokes using Job Access With Speech (JAWS) 16.0. While this guide is intended for entry-level end users, it assumes that the users have already learned the basics of the Beneficiary Travel Self- Service system and using their assistive technology for accomplishing basic tasks such as entering text and data or selecting links or buttons.

The Section 508 Job Aid is divided into two sections. The first section presents BTSSS functionality and observations found in the system. The second section presents known issues within the Dynamics 365 system.

The VA seeks to advance the Beneficiary Travel program by creation of a web-based beneficiary self-service application that will automate claims submission and travel reimbursement payment.

The BTSSS will provide features and capabilities that leverage automation and multiple user-interface capabilities to manage and process Beneficiary Travel claims, common in commercial software. The VA has acquired **Microsoft Dynamics 365 a Commercial Off-the-Shelf (COTS)** software product that has been customized to integrate with the VA's Veteran identification systems for records and the appointment scheduling systems.

The **Microsoft Dynamics 365** has two components. The **Portal** and the **CRMOL**. Both are web based. We incorporated Section 508 requirements right from the beginning of development.

The Portal piece is more 508 compliant and easier to control for customization by developers and we were able to fix most of the 508 defects.

All error messages are linked to the form field to avoid screen readers being trapped in the error and designed to help them complete the form fields successfully.

In the portal we were able to fix alt text, focus, labels, most table headers, color contrast, error messaging etc. A few we could not fix due to **COTS limitation** include table headers, Calendar Picker, some form field labels etc.

The **CRMOL** is highly not 508 compliant. Microsoft has primarily locked down the templates and the look and feel. Our developers have no control over how most forms

are generated and it has numerous **COTS** defects.

Here is a list of some of the COTS defects of **Microsoft Dynamics 365**.

They fail

1194.21A - **WCAG 2.0** -2.1.1 Keyboard)

1194.21 L-**WCAG 2.0- 3.3.2 Labels or Instructions (Level A)**

1194.21D-**WCAG2.0-4.1.2 Name, Role, Value (Level A**

1194.22A --**WCAG 2.0-** 1.1.1 Non-text Content [A]

1194.22D

1194. 22 I **WCAG 2.0** [12.1](#) Title each frame to facilitate frame identification and navigation.

1194. 22 N - **WCAG 2.0**3.2.1 On Focus [A], 3.2.2 On Input [A] 3.3.2 Labels or Instructions [A]

1194. 22 O- **WCAG 2.0**3 [13.5](#) Provide navigation bars to highlight and give access to the navigation mechanism. (Priority 3)

[13.6](#) Group related links, identify the group (for user agents), and, until user agents do so, provide a way to bypass the group. (Priority 3)

1194.22P

1194.31 A- **WCAG 2.0-302.1 Without Vision**

1194.31 F-**302.7 With Limited Manipulation**

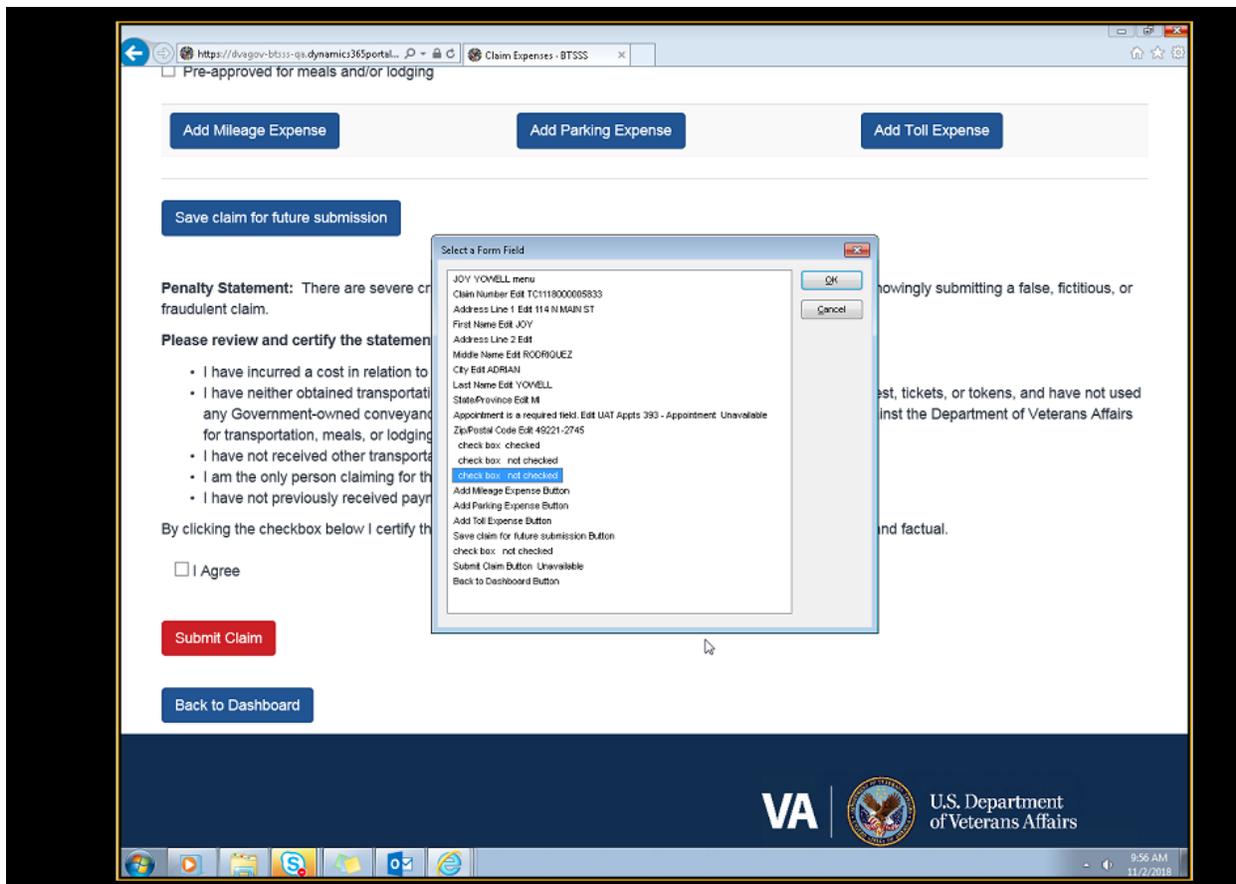
- Most images do not have alt text in the CRMOL
- Tables do not have headers and row and scope attribute.
- CRMOL has lots of title tags and that same information is not available to screen reader users
- When Style sheets are disabled the reading order of the information is not correct and there is confusing code that appears on the screen.
- Form fields are not programmatically labelled to associate the label with the form field
- Color contrast issues- some text fails color contrast and are not in the ratio of 4:5:1.
- Not all drop downs are Keyboard accessible.
- All error messages are not accessible to the screen reader.
- Frames don't have meaningful titles
- A skip link cannot be provided as a means is provided for users to skip such information and go directly to the main content.
- Headers are not hierarchical

- Title information is not revealed by placing the keyboard focus on the element and, it is not conveyed through screen text or visual context. Same for tool tips help text for form fields.

## 2. PORTAL

### 2.1. Claim expenses page- Check boxes are not labeled

Description	Work-Around
<p>When JAWS user pulls up list of form fields Insert F5 the check boxes is not labelled. In the Claim expenses page below, there are three check boxes not labelled and show up on the short cut for list of form fields with "check boxes not checked."</p> <p>So, the screen reader does not know which check box is associated with which label.</p>	<p>There are three check boxes in the order below.</p> <p>The first one is used a personal car to drive to appointment.</p> <p>Second is Took a common carrier to get to appointment (e.g. Train, bus, subway, taxi, airplane, etc.)</p> <p>Third is: Pre-approved for meals and/or lodging.</p>



## 2.2. Buttons programmed as Links

### 2.2.1. Edit/Delete Button Programmed as a link

Description	Work-Around
<p>Throughout the applications buttons are programmed as links. When a screen reader looks for edit or delete buttons in short cut for buttons it does not show up. They are programed as links and when you pull the short cut list for links Edit and Delete show up.</p>	<p>In the Claim expense page, if you want to edit or delete an expense, Press Insert F7 with JAWS on to pull up a list of links. You will find edit and delete links.</p>

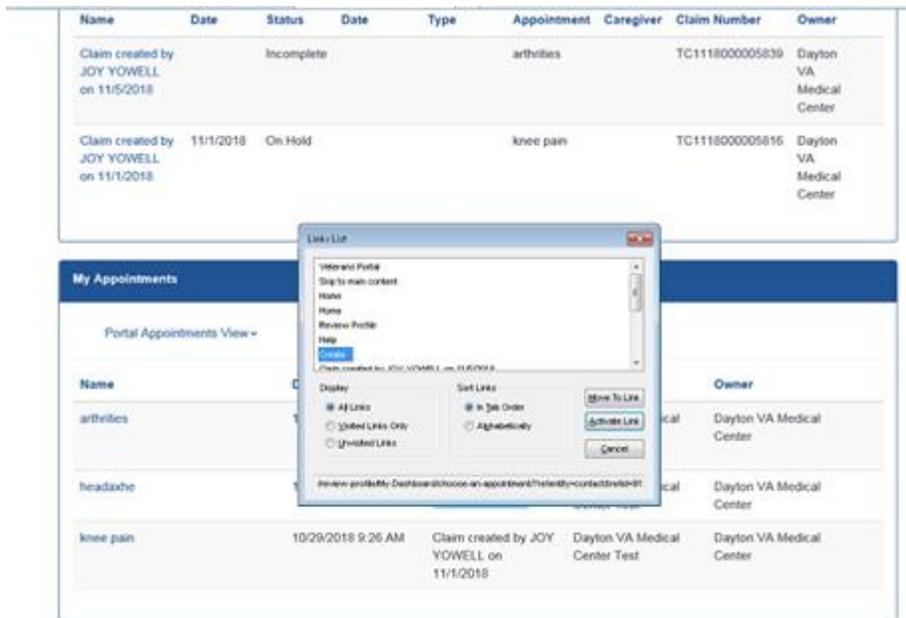
## Expense Line Items

Type	Date	Description	Requested	Submitted	
Mileage	11/16/2018	(Miles: 4.38)	\$2.23	\$0.00	<a href="#">Edit</a> <a href="#">Delete</a>
<b>Total</b>				\$0.00	

### 2.2.2. Create Button Programmed as a link

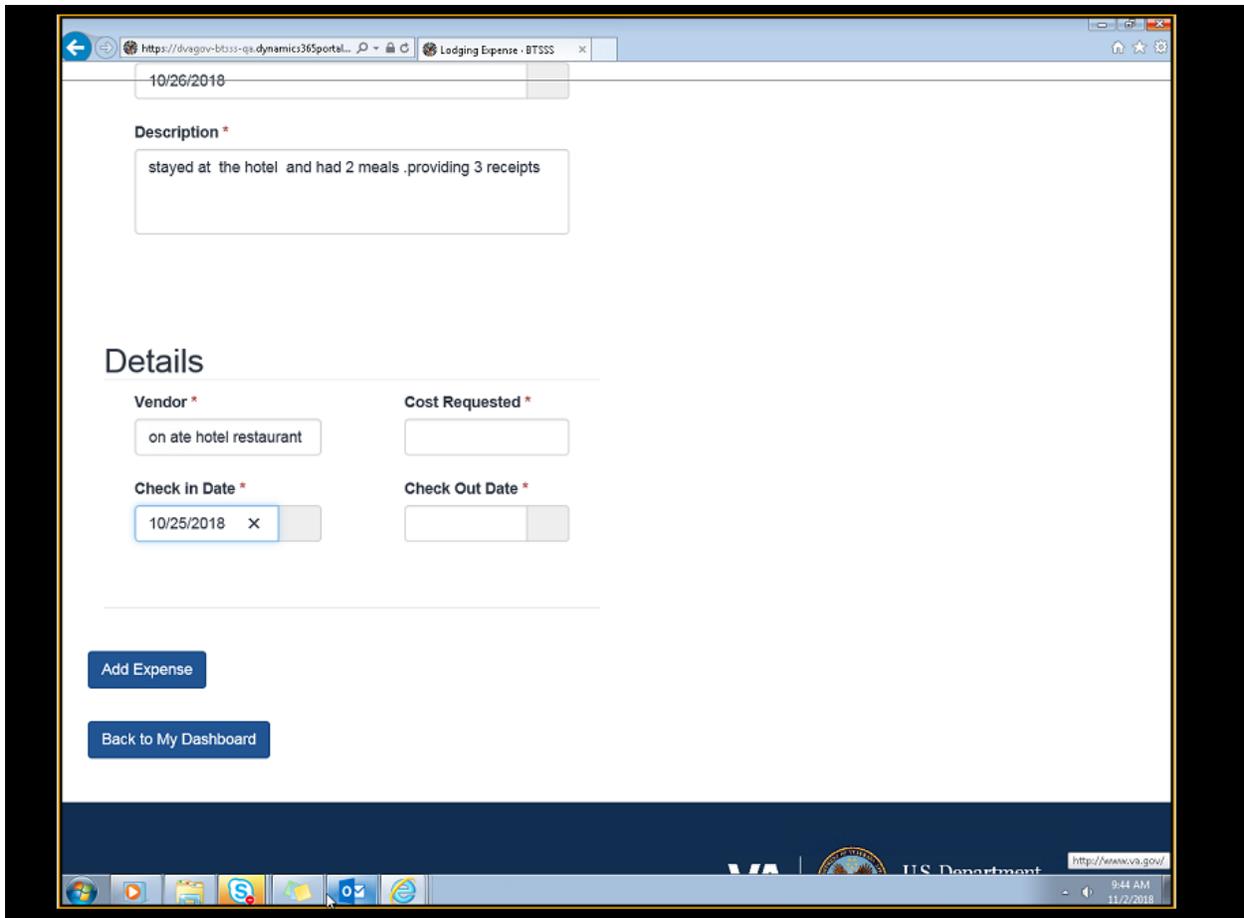
Description	Work-Around
Throughout the applications buttons are programmed as links. When a screen reader looks create button in short cut for buttons Insert F5 for form fields, it does not show up. They are prograded as links and when you pull the short cut list for links Create button shows up.	In the Dashboard page, if you want to create a claim Press Insert F7 with JAWS on to pull up a list of links.  You will find edit and delete links.

Create button programmed as a link hence not showing up in the list of buttons for screen reader users.



### 2.3. Tab order out of order

Description	Work-Around
<p>In the lodging expense page When a keyboard user's tabs to the Vendor check box it goes to Check in date instead of cost requested and then to cost requested and check out date.</p>	<p>There is no workaround as such. Just setting expectations for screen reader user so they know the tab order.</p> <p>From Check in date one tabs it goes to cost requested and then tabs to check out date.</p>



### 3. Microsoft Dynamics 365

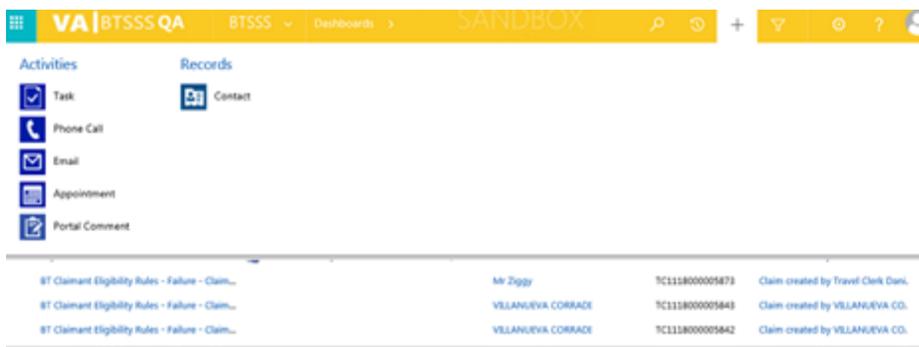
#### 3.1. Address Verification Popup

In a user edits expense, a mileage expense, the addresses will need to be re-verified. If they fail, the address verification popup will appear and allow the claimant to select an address from a list of similar addresses or reenter their address. That popup is not accessible to the screen reader and is not programmatically available to JAWS. This is a cots problem.

Screen Reader user stuck here as address verification popup is not programmatically available to JAWS. There is no workaround for this.

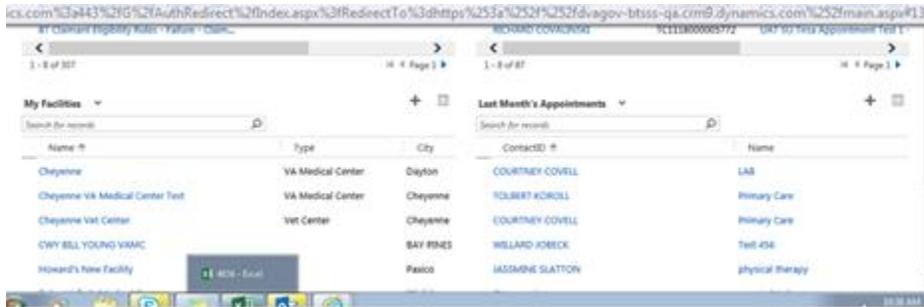
### 3.2. CRM Add a Task Button Not accessible with Keyboard with JAWS on

In Dynamics 365, the task button is not accessible by keyboard to a Jaws user. Jaws user should pull the short cut key for links, Insert F7 and select new info and activities and then choose task under activities drop down and that creates a new task.



### 3.3. Search for Records Form fields not labeled

Description	Work-Around
<p>There are four "Search for Records" field in the main page in Dynamics 365 interface.</p> <p>When JAWS user uses the short cut key for form fields Insert F5 there are 4 search records and screen reader user cannot tell the difference between different search for records- not named meaningfully. This is a COTS problem.</p>	<p>So, JAWS user has to count to the third "search for records" to get to the facilities.</p>



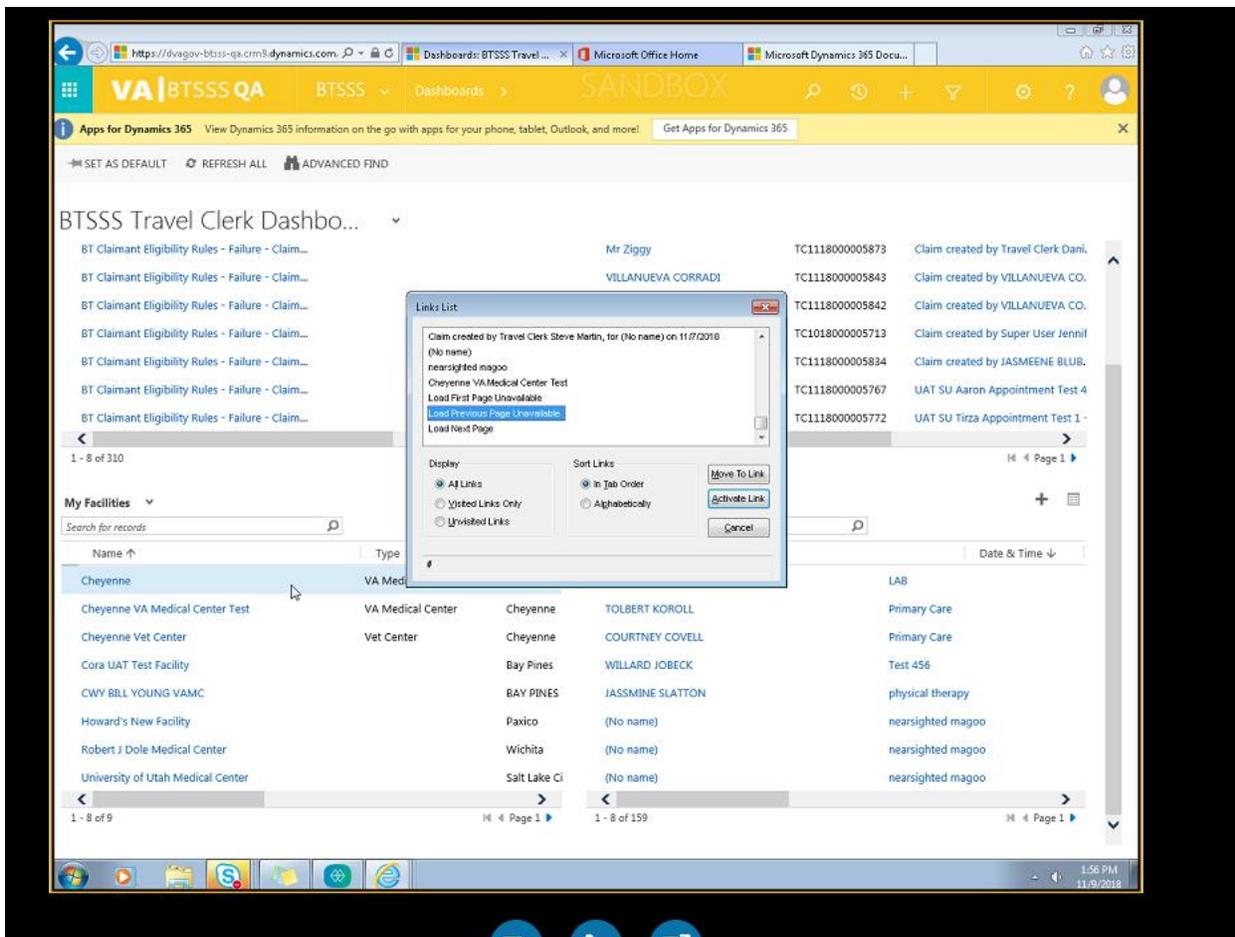
### 3.4. Create appointment Plus button in CRM

Description	Work-Around
<p>The create appointment PLUS button is not accessible with the keyboard when JAWS are running. Strangely it is accessible with keyboard with JAWS off but that will not help a screen reader user.</p>	<p>So, JAWS user has to tab to Search for records field and tab back because tab forward from HOME will not able to get the PLUS NEW BUTTON. So, they have to use Insert f5 bring up search records and tab several tabs to get to plus new button and then press enter and it takes you the appointment information page.</p>



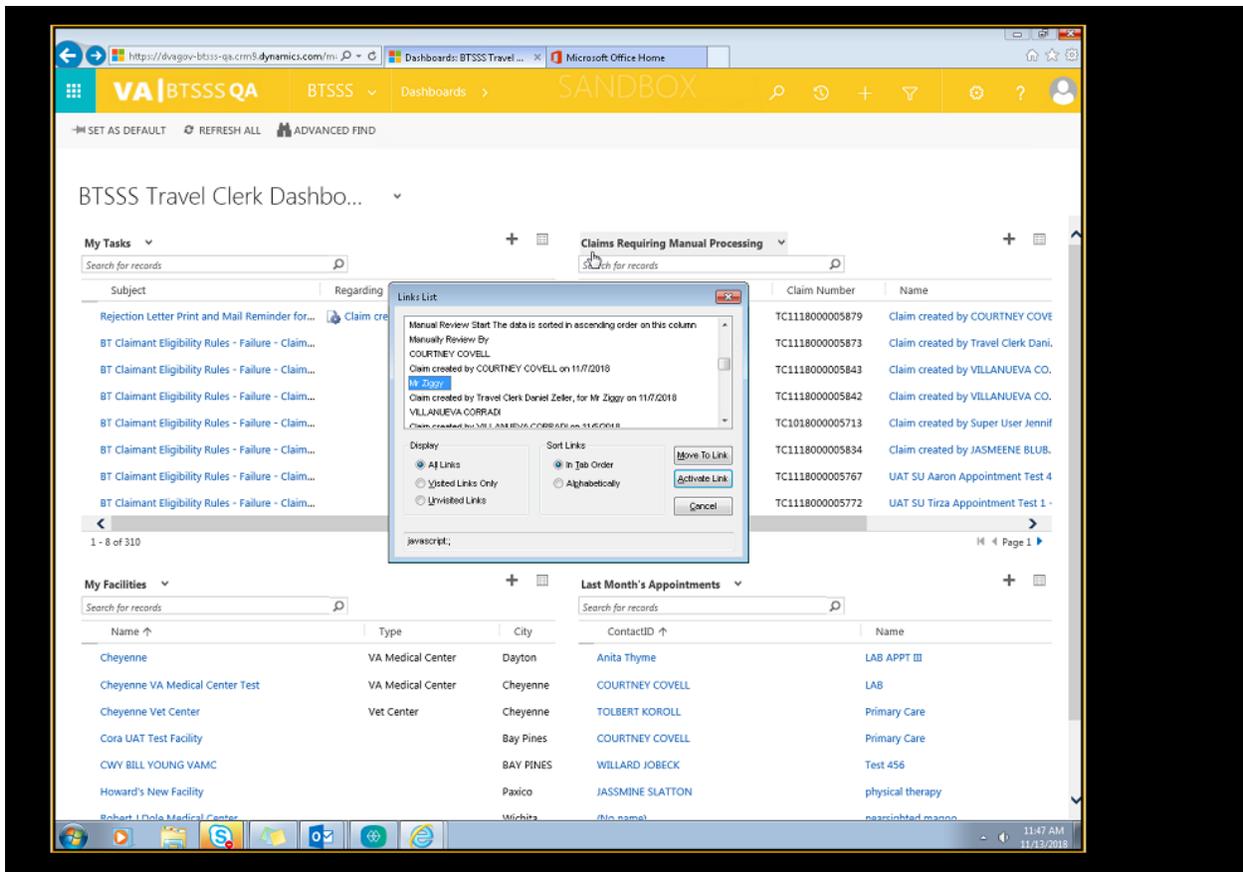
### 3.5. Load page next links

Description	Work-Around
<p>All load next page links are named the same for short cut for links for JAWS users- so user can't tell which table they belong to.</p>	<p>So, JAWS user has to count to the third load next page to go to the next page on the facility table. Or they have to use short cut key Insert f5 and navigate to the third search for records and then tab to the Load Next Page for facility table.</p>



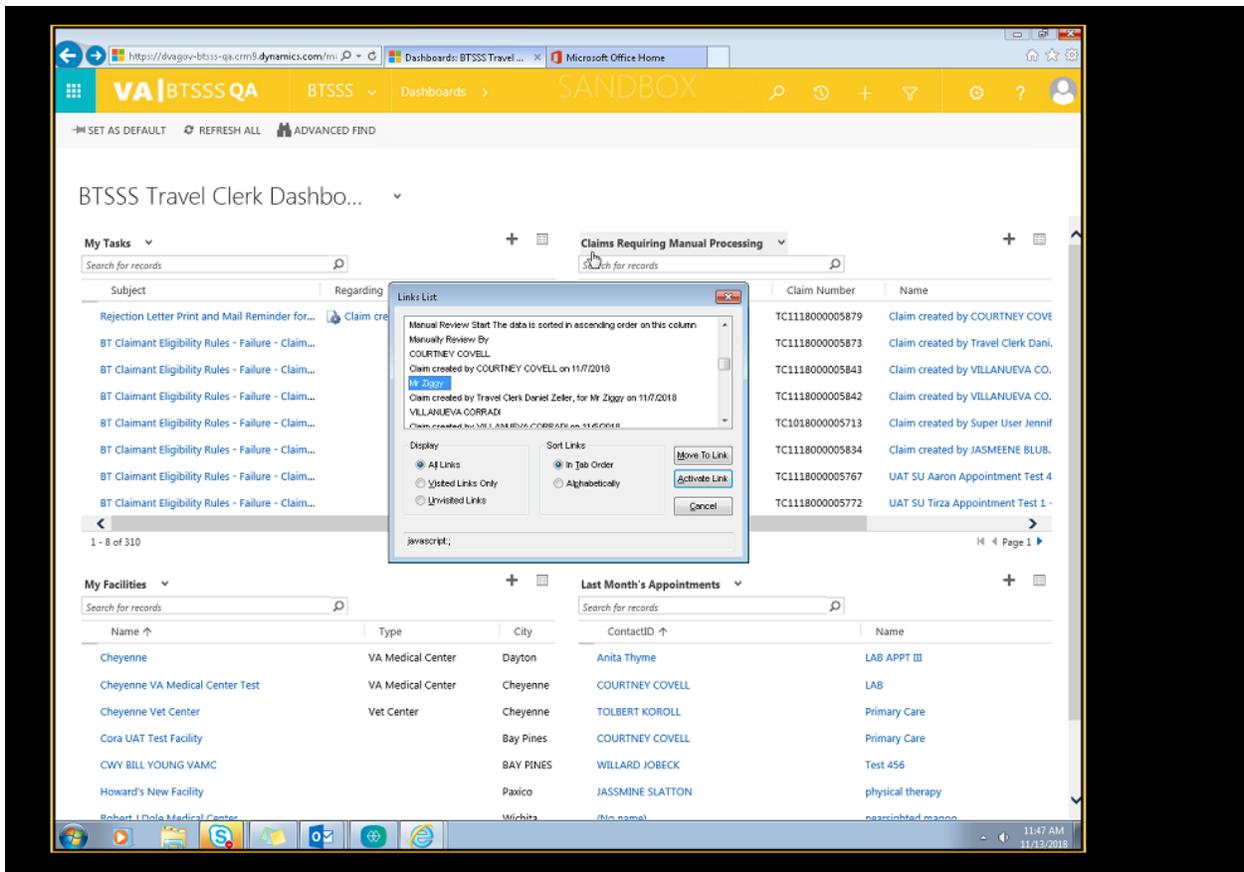
### 3.6. CLAIM MANUAL REVIEW

Description	Work-Around
<p>All search for records are named the same instead of naming them associating with a facility or a task or claim. For Eg Task Search for Record. That is more meaningful. They should be tied to the table they are in.</p>	<p>The JAWS user cannot easily to get to a claim. Either they have to use the short cut key for form fields Insert f5 and go the second search record and then tab to the table and choose the claim or they have to know the name of the claim before and use short cut for links Insert f7 and click on Mr. Ziggy</p>



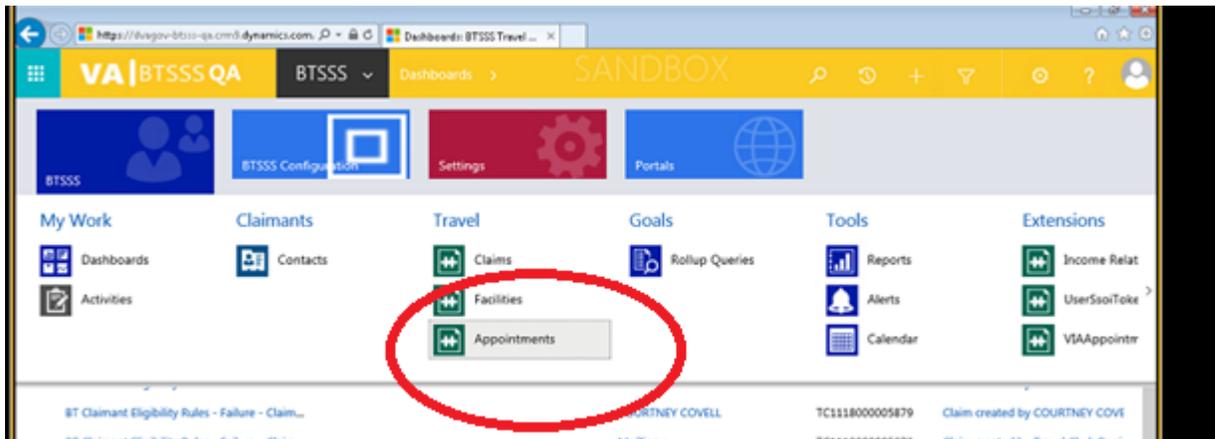
### 3.7. Load next Page links

Description	Work-Around
<p>All load next page links are named the same so you can't tell which table they belong to.</p>	<p>Load next page all links named the same so impossible to distinguish and jaws user has to count the number to match the table.</p>



### 3.8. Create Appointment

Description	Work-Around
<p>In the BTSSS main menu in Dynamics 365 The Travel Clerk selects the V (down arrow) next to BTSSS in the header. Then, they select the blue BTSSS box in the dropdown if it is not already selected</p> <p>(it is the default selection) and select Appointments under the Travel section. The screen reader is taken to the appointments page. This is not keyboard accessible.</p>	<p>JAWS user should use the short cut key for links Insert f7 –create a new VA appointment record instead of accessing the new button on top menu.</p>



VA APPOINTMENT : INFORMATION  
 New VA Appointment

General

Name \*

OW: You must provide a value for Name.

Date & Time \* --

Facility Name \* --

Completed  No

Appointment Type \*  Other

Service Connected Disability  No

Created On Portal  No

Links List

Save & Close: Save and Close this VA Appointment

Save: Create a new VA Appointment record

Pop Out

Close

Print

Collapse this tab

General

Display

All Links

Visible Links Only

Hidden Links

Sort Links

In Job Order

Alphabetically

Move To Link

Enable Link

Cancel

Modified By

Modified On

Created By

Created On

External System Key

External Appointment

ContactID \*

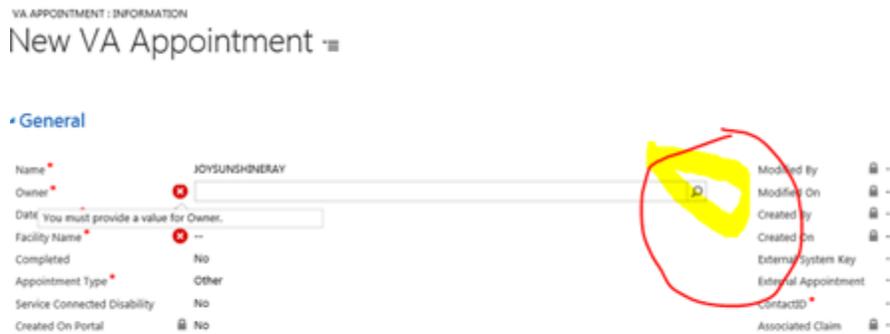
Associated Claim

### 3.9. To choose a facility

Description	Work-Around
<p>To choose a facility is not an easy for a screen reader user.</p>	<p>To choose a facility JAWS user should use JAWS short cut key Insert f7 then select a value than arrow through and pick a facility.</p> <p>And choose Insert F7 and select to Save this VA appointment.</p> <p>To choose facility use Insert f7 then select a value and choose a contact ID by arrowing through it.</p> <p>And then choose magnifying glass with pc cursor and arrow through to pick an item.</p> <p>Select Insert f7 choose to save and close option.</p>

### 3.10. Magnifying glass for search not accessible by keyboard

Description	Work-Around
<p>The magnifying glass next to the owner field in the New VA appointment page is not accessible to a screen reader to choose options.</p>	<p>JAWS user should use pc cursor and then the invisible cursor and try to select the options and then choose magnifying glass with pc cursor and arrow through to pick an item.</p> <p>Insert f7 choose to save and close option.</p>



### 3.11. The plus button on the top right of the Appointments subgrid

Description	Work-Around
<p>The + button on the top right of the Appointments subgrid is not accessible to a screen reader.</p>	<p>JAWS user should turn on the invisible cursor move it around then find the plus sign JAWS says "ADD" and then select it to get to the the form.</p>

VA APPOINTMENT INFORMATION

## New VA Appointment

**General**

Name\*  --

Owner\*  Sujatha Balakumar

Date & Time\* --

Facility Name\*

Completed

Appointment Type\*

Service Connected Disability

Created On Portal 

Modified By  --

Modified On  --

Created By  --

Created On  --

External System Key --

External Appointment --

ContactID\*  JASALEE BALINT

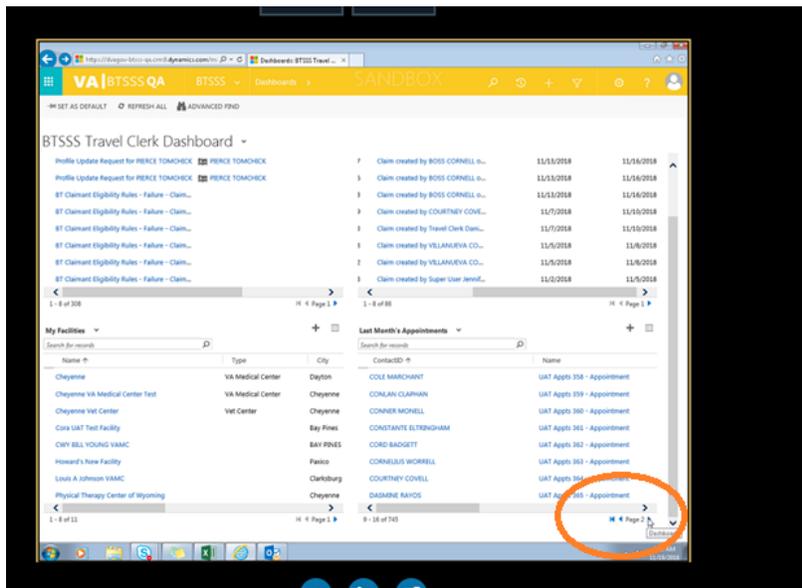
 687 687	Charlotte
 Aberdeen VA Clinic 438GD	Aberdeen
 Aberdeen Vet Center Outstation 2092	Aberdeen
 Abilene CBOC 519HC	Abilene
 Ada CBOC 635	Ada
 Afton Outreach Clinic 666	Afton
 Aiken Community Based Outpatient Clinic 509GB	Aiken

10 results + New

**Active**

### 3.12. APPOINTMENT PAGING

Description	Work-Around
<p>Appointments table to go to the next page It is not easy to get to the right arrow button on the bottom right of the last months appointment page table.</p>	<p>JAWS users have to navigate to the 4<sup>th</sup> search record either by tabbing or JAWS short cut key for form fields Insert f5 to go to the appointment table then we tab through all the links painfully and switch to the PC CURSOR – minus sign on the num pad and that tells JAWS USERS where they are. Then you switched to the INVISIBLE CURSOR which is enabled by pressing the INSERT AND PLUS KEY and then you can hear next page previous page and you choose the next page to go the next page. Jaws announced previous page and you have to over the arrow to hear next page.</p>



### 3.13. APPOINTMENTPAGING 2

Description	Work-Around
<p>There is a workflow where the Travel Clerk selects the right arrow button on the bottom right of the Last Month's Appointments subgrid to go to a new page.</p>	<p>The JAWS user has to use the list of links Insert F7 and choose the first load next page link and it takes you the new page. Pressing the same Insert F7 choose Load Previous Page and it takes you back to the previous page.</p>

### 3.14. AppointmentFilterFirstLetter

Description	Work-Around
<p>The Travel Clerk selects a letter from the horizontal list of letters at the bottom of the page.</p> <p>The subgrid is now filtered to only show appointments starting with the chosen letter. This is not easy for a JAWS user.</p>	<p>If the screen reader user wants to read the entire contents of the screen for appointments they would have to route the JAWS cursor to the PC cursor- by pressing the Insert Minus sign on the numpad.</p> <p>The JAWS user has to use the arrow key and then go over to the arrows from A-Z and choose the contact they want by the letter. This requires a very experienced JAWS user.</p>

VA | BTSSS QA | BTSSS | Appointments | SANDBOX

My Facility's Appointments

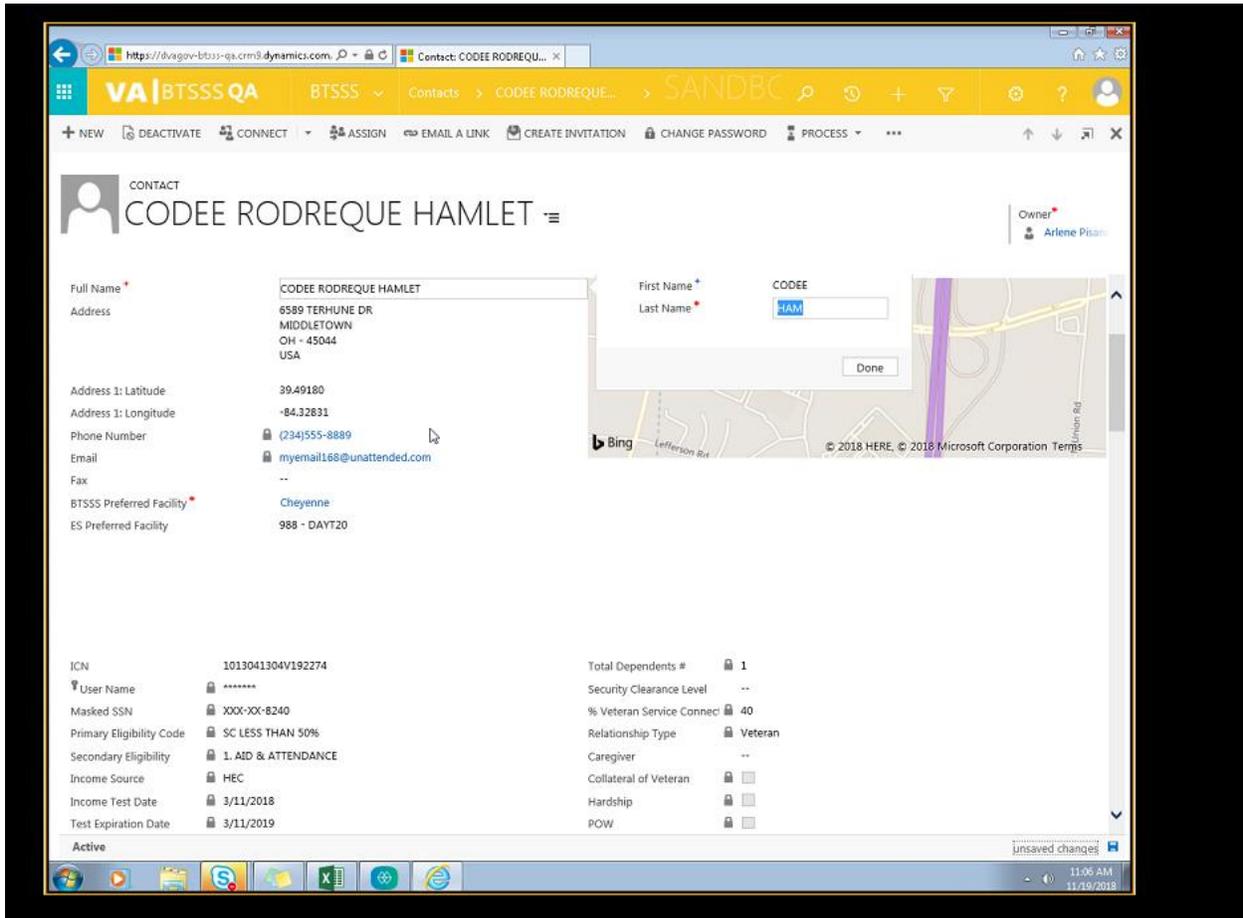
Search for records

ContactID ↑	Name	Facility Name	Associated Claim
JASALEE BALINT	JOVBONE	Abilene CBOC	
JOHNBOY DOTZEL	JOHNBOY.K.DOTZEL	CWY BILL YOUNG VAMC	Claim created by JOHNBOY DOTZI
JOHNBOY DOTZEL	johnboy.k.dotzel	Cheyenne	Claim created by JOHNBOY DOTZI
Jack Nicholson	Jack Dayton	Cheyenne	

Charts

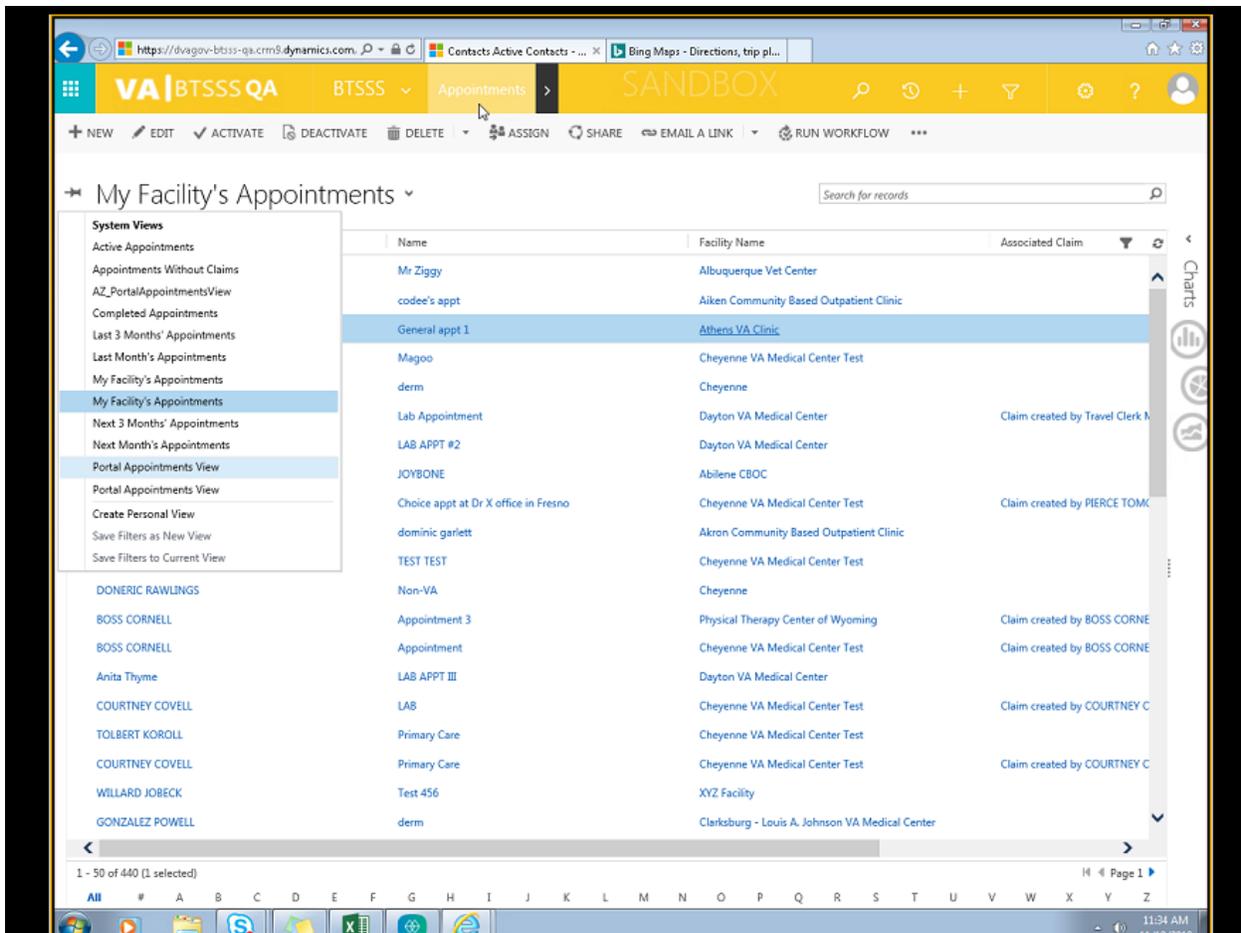
All (0 selected) | A B C D E F G H I J K L M N O P Q R S T U V W X Y Z | Page 1 | 11/19/2018

### 3.15. Editing an Appointment



Description	Work-Around
<p>To save changes an appointment page.</p>	<p>When a JAWS user makes changes to an appointment page, to save it, the Jaws user should use short cut key Insert f7 Screen reader choose short cut for unsaved changes and tab to save the edits. JAWS announce saving changes.</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>

**3.16. Appointment Default View**



## Description

To choose an appointment default view.

## Work-Around

To choose an appointment default view, the Jaws user can navigate to search for records and shift tab to get to My facility appointments drop down.

Then they have Shift tab left to press enter on push pin. Then they are able to choose the view.

