

MICHIGAN STATE

UNIVERSITY

Alpha Presentation Project Plato

The Capstone Experience

Team GM

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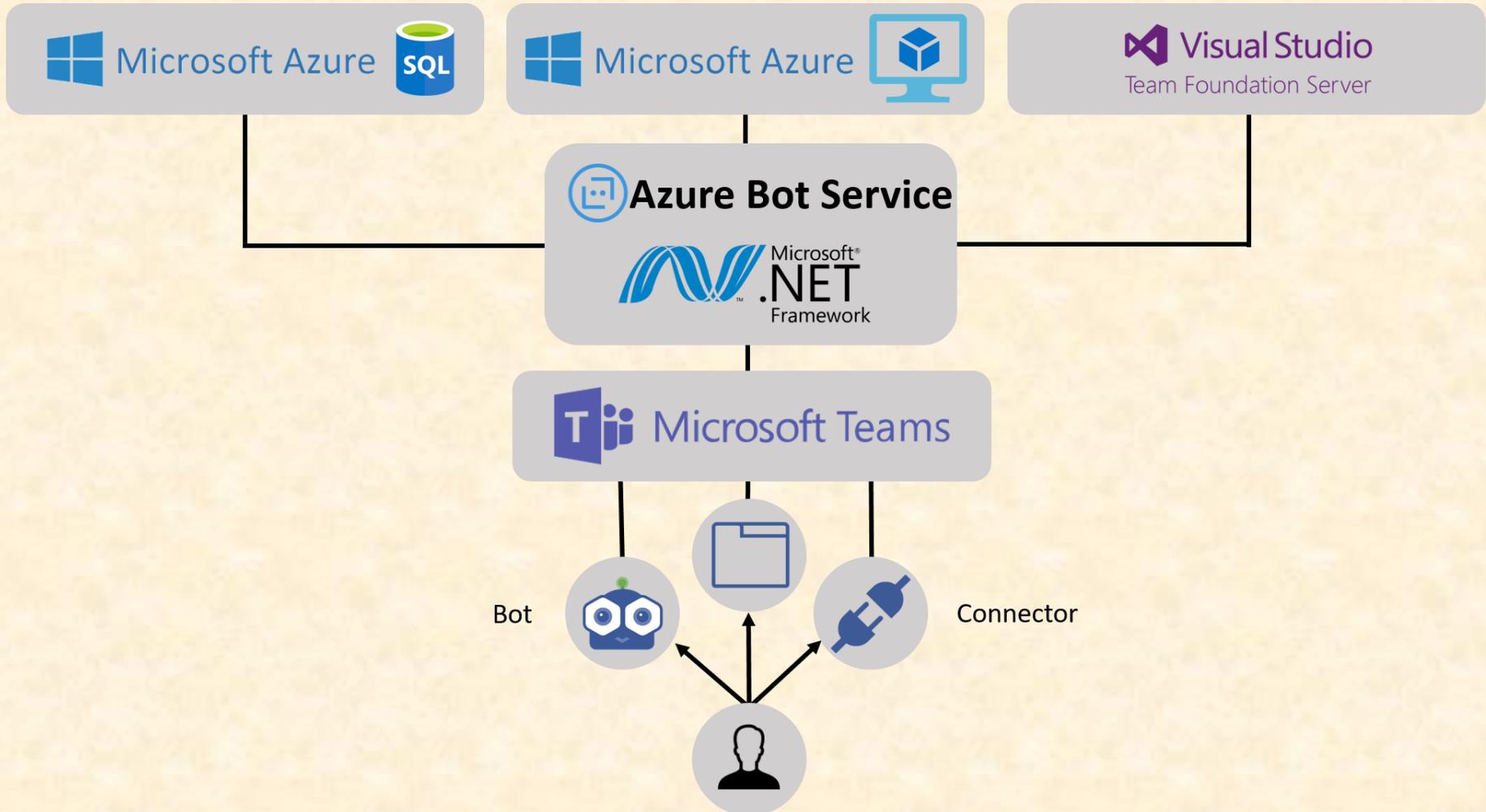
*From Students...
...to Professionals*

Project Overview

- Consolidate Common Developer Tasks Into Microsoft Teams
- Create and Manipulate Virtual Machines
- Discover and Run Test Cases
- Consists of Three Components:
 1. AI Chatbot
 2. Microsoft Teams Tab
 3. Microsoft Teams Connector
- Provide a Unified and Familiar Environment for Developers



System Architecture



VM Creation Through Bot

The screenshot shows a Microsoft Teams chat interface. On the left is a navigation pane with icons for Activity, Chat, Teams, Meetings, Files, Store, and Feedback. The main chat area is titled 'Plato' and shows a conversation. The bot Plato has sent a card with the text: 'Plato I need a vm with 16gb of ram, 8 cores, and a 500gb hard drive'. Plato then asks: 'I can help you create a virtual machine! Let's get started. What would you like to name your virtual machine?'. A user has responded with 'UbuntuVM'. Plato then asks: 'What kind of operating system would you like to install?'. Below this question are four buttons: 'Ubuntu', 'Debian', 'Arch Linux', and 'Windows 10'. A user has responded with 'Ubuntu'. At the bottom of the chat is a text input field with the placeholder 'Type your questions here' and a send button.



VM Creation Through Bot

The screenshot shows a Microsoft Teams chat interface. On the left is a navigation pane with icons for Activity, Chat, Teams, Meetings, Files, Store, and Feedback. The main chat area is titled 'Plato' and shows a conversation. The bot Plato has sent a card asking: 'Would you like to create a **Ubuntu** VM with **16GB** of RAM, **8** Cores, and **500GB** of hard disk space?'. A response bubble on the right contains the text 'yes'. Below this, Plato has sent another message: 'OK! Here's your virtual machine! Click confirm to start it!'. A modal dialog box is displayed over the chat, titled 'Confirm Your VM Creation: UbuntuVM'. The dialog contains the following text: '**OS:** Ubuntu **RAM:** 32 **Cores:** 8 **Disk Space:** 500'. At the bottom of the dialog are two buttons: 'Confirm' and 'Cancel'. At the bottom of the chat window is a text input field with the placeholder 'Type your questions here' and a set of icons for text, emojis, GIFs, and attachments.



VM Creation Through Bot

12:46 AM
Plato I need a vm with 16gb of ram, 8 cores, and a 500gb hard drive

Plato 12:46 AM
I can help you create a virtual machine! Let's get started.

What would you like to name your virtual machine?

12:46 AM
UbuntuVM

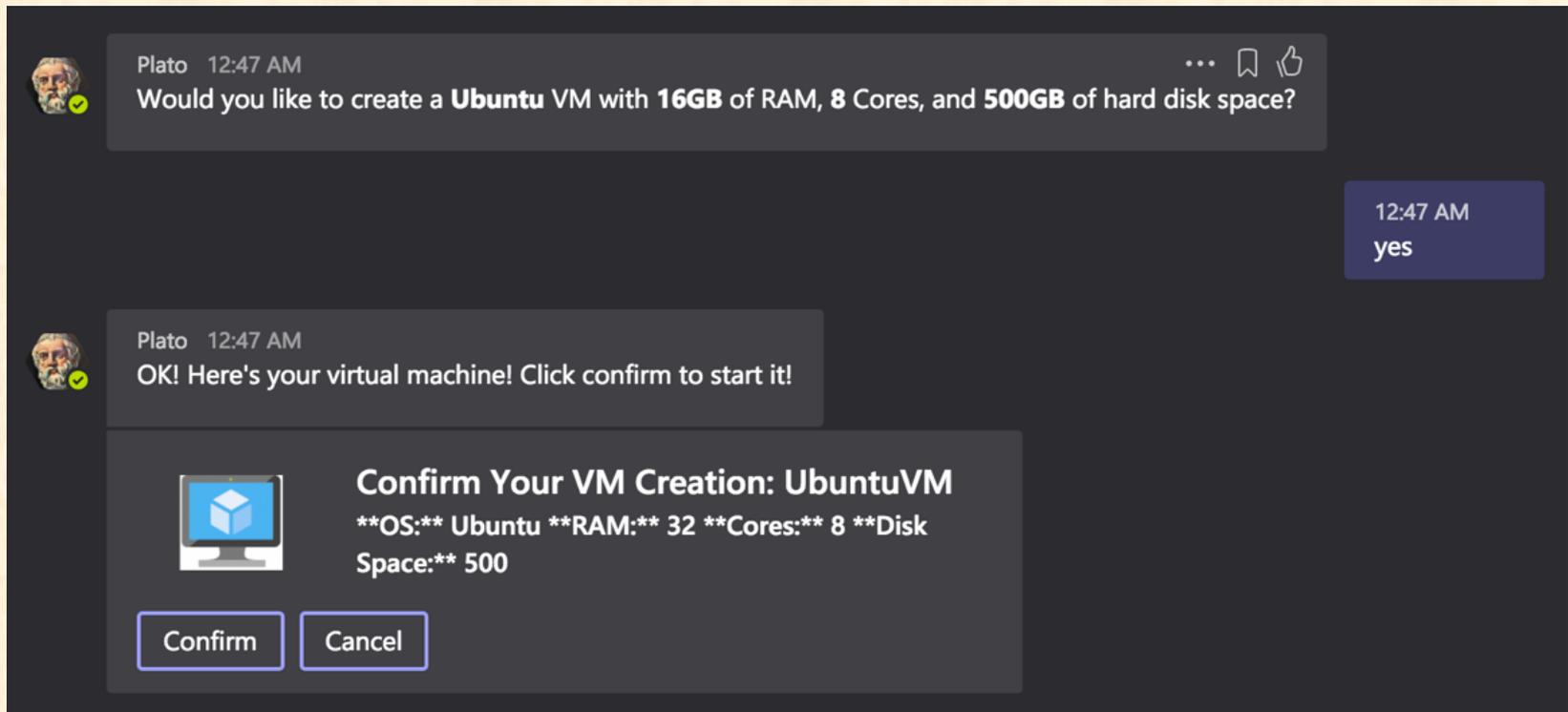
Plato 12:46 AM
What kind of operating system would you like to install?

Ubuntu Debian Arch Linux Windows 10

12:47 AM
Ubuntu



VM Creation Through Bot



Plato 12:47 AM
Would you like to create a **Ubuntu** VM with **16GB** of RAM, **8** Cores, and **500GB** of hard disk space?

12:47 AM
yes

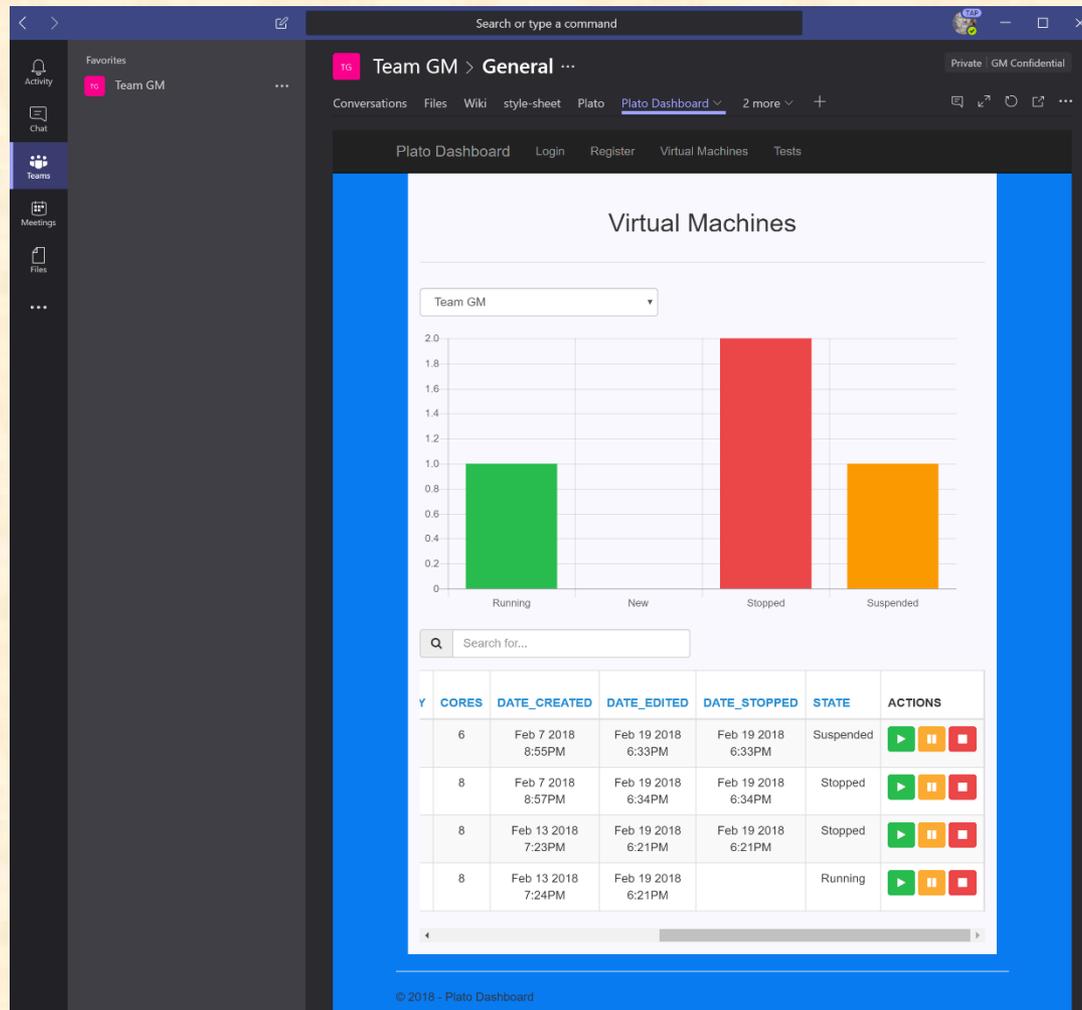
Plato 12:47 AM
OK! Here's your virtual machine! Click confirm to start it!

 **Confirm Your VM Creation: UbuntuVM**
OS: Ubuntu **RAM:** 32 **Cores:** 8 **Disk
Space:** 500

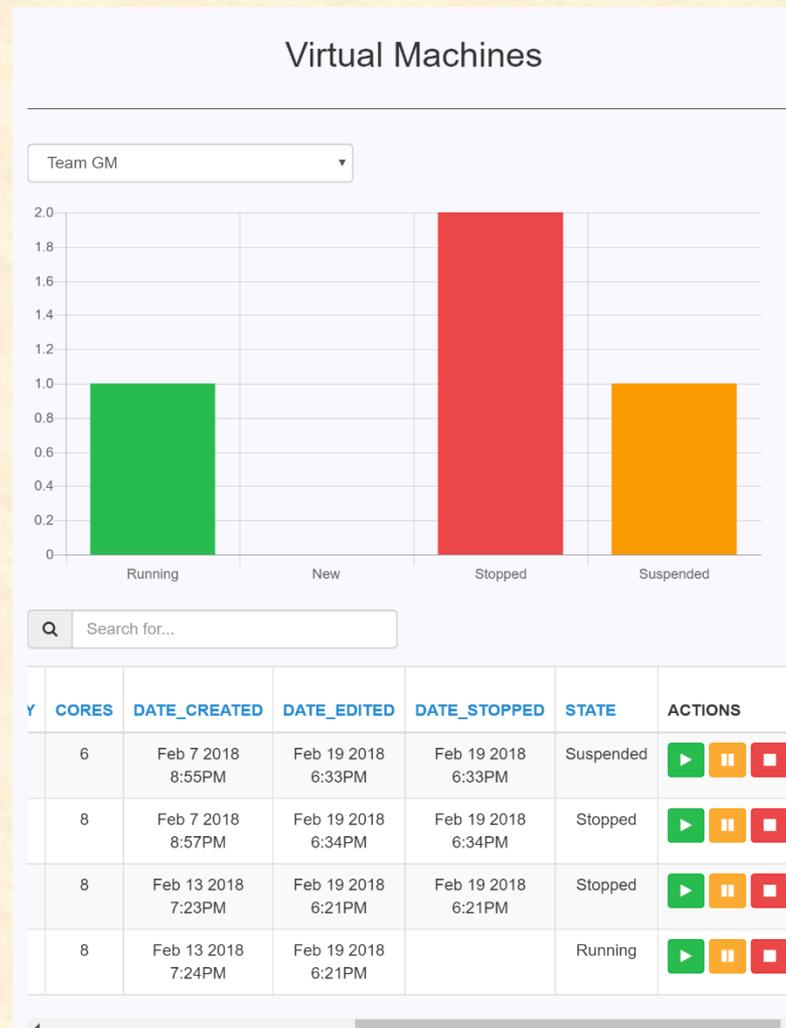
Confirm Cancel



Virtual Machines Dashboard



Virtual Machines Dashboard



Information on Clicked VM

Search or type a command

Team GM > General ... Private | GM Confidential

Conversations Files Wiki style-sheet Plato Plato Dashboard 2 more +

Plato Dashboard Login Register Virtual Machines Tests

Virtual Machines

Team GM

Hard Drive Capacity

Cores

Memory

0 10 20 30 40 50 60 70

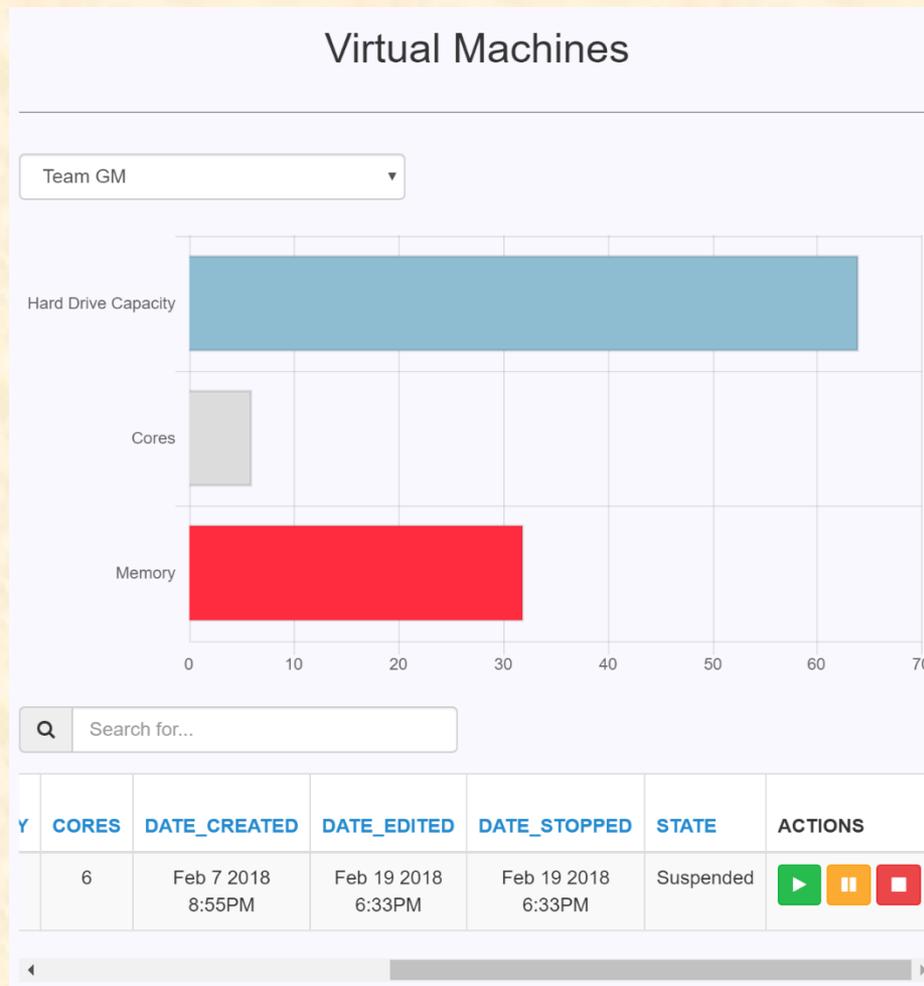
Search for...

✓ CORES	DATE_CREATED	DATE_EDITED	DATE_STOPPED	STATE	ACTIONS
6	Feb 7 2018 8:55PM	Feb 19 2018 6:33PM	Feb 19 2018 6:33PM	Suspended	  

© 2018 - Plato Dashboard



Information on Clicked VM



Tests Dashboard

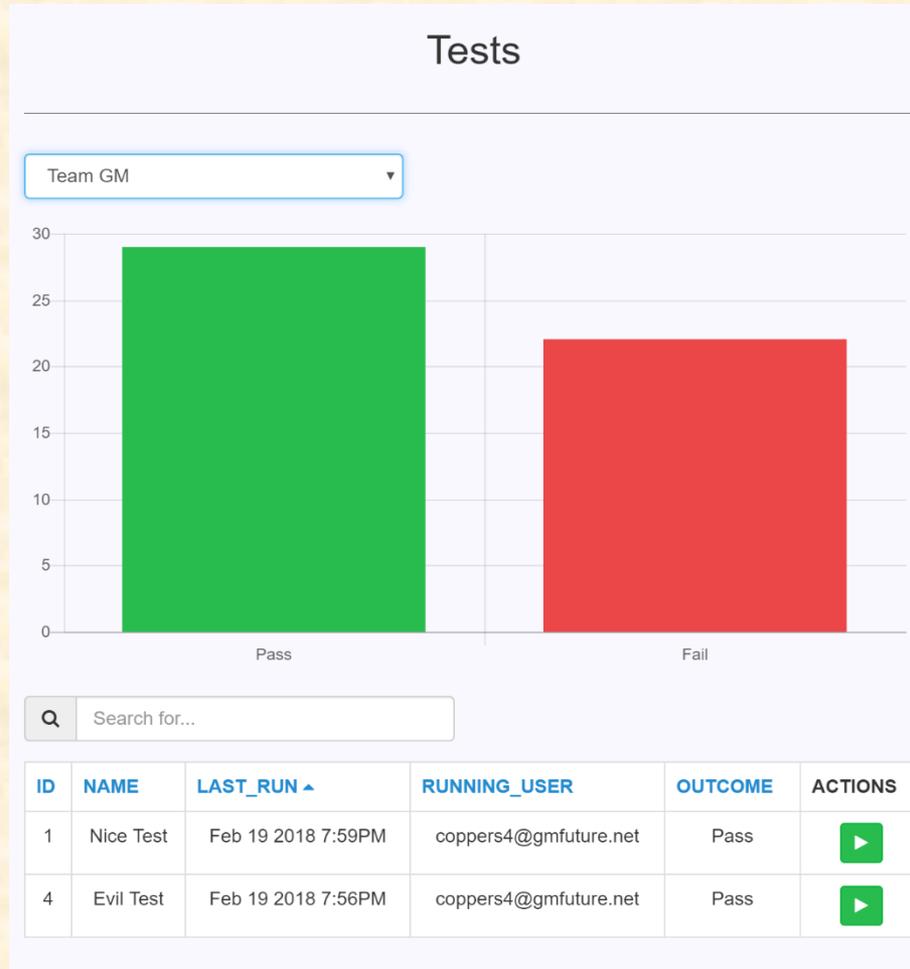
The screenshot shows the Microsoft Teams interface with the Plato Dashboard open. The dashboard is titled 'Tests' and shows a bar chart for 'Team GM'. The chart has two bars: a green bar for 'Pass' with a value of 29, and a red bar for 'Fail' with a value of 22. Below the chart is a search bar and a table of test results.

ID	NAME	LAST_RUN ▲	RUNNING_USER	OUTCOME	ACTIONS
1	Nice Test	Feb 19 2018 7:59PM	coppers4@gmfuture.net	Pass	
4	Evil Test	Feb 19 2018 7:56PM	coppers4@gmfuture.net	Pass	

© 2018 - Plato Dashboard



Tests Dashboard



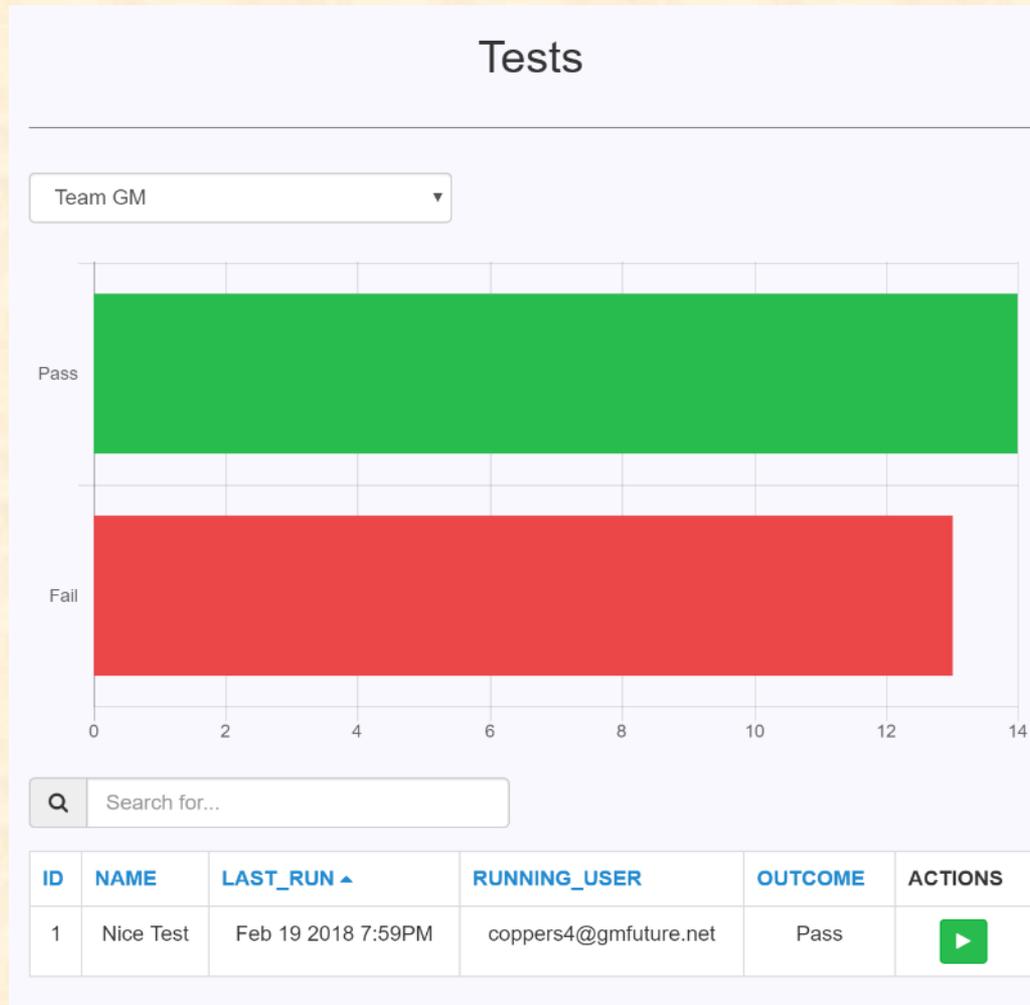
Information on Clicked Test

The screenshot shows a Microsoft Teams chat window for 'Team GM' in the 'General' channel. The chat content displays a 'Plato Dashboard' with a 'Tests' section. The dashboard includes a dropdown menu for 'Team GM', a bar chart showing 'Pass' (green) and 'Fail' (red) counts, and a table of test results.

ID	NAME	LAST_RUN	RUNNING_USER	OUTCOME	ACTIONS
1	Nice Test	Feb 19 2018 7:59PM	coppers4@gmfuture.net	Pass	

© 2018 - Plato Dashboard

Information on Clicked Test



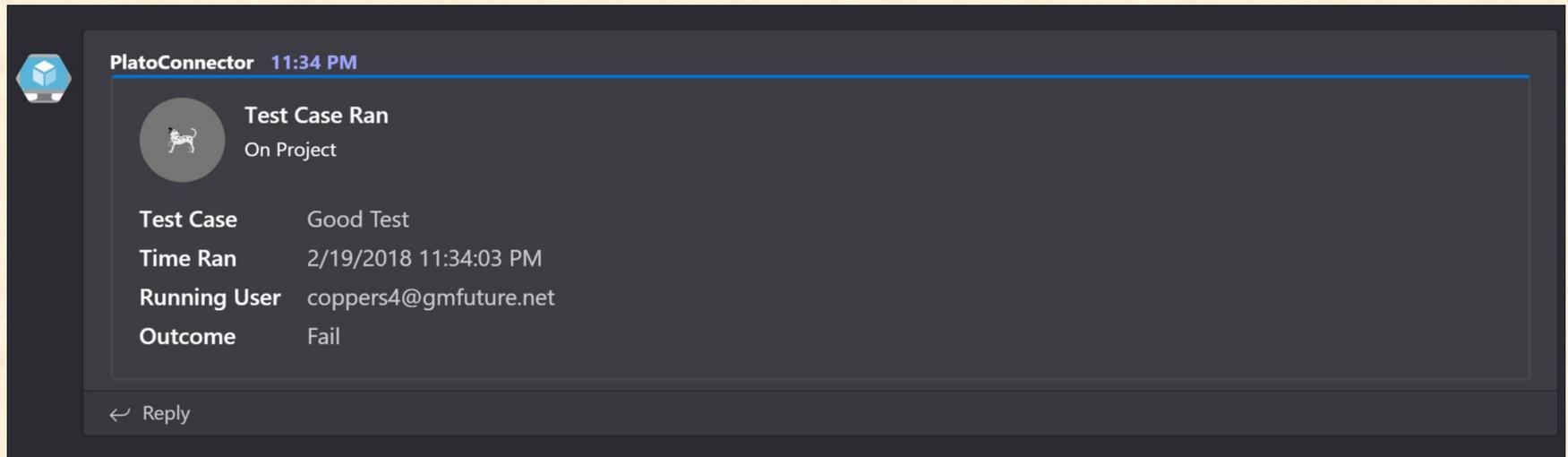
Connector for Test Case Runs

The screenshot shows a Microsoft Teams chat window for a channel named "Team GM > General". The chat history contains two messages from a bot named "PlatoConnector". Each message is a card titled "Test Case Ran" with the following details:

- Message 1 (11:32 PM):**
 - Test Case: Good Test
 - Time Ran: 2/19/2018 11:32:30 PM
 - Running User: coppers4@gmfuture.net
 - Outcome: Pass
- Message 2 (11:34 PM):**
 - Test Case: Good Test
 - Time Ran: 2/19/2018 11:34:03 PM
 - Running User: coppers4@gmfuture.net
 - Outcome: Fail

The interface includes a search bar at the top, a left-hand navigation pane with icons for Activity, Chat, Teams, Meetings, Files, and Store, and a bottom input area with a "Start a new conversation, use @ to mention someone" prompt and various action icons.

Connector for Test Case Runs



The screenshot shows a notification interface for PlatoConnector. At the top left is a blue cube icon. The notification header reads "PlatoConnector 11:34 PM". Below this is a circular icon with a dog silhouette, followed by the text "Test Case Ran" and "On Project". A list of details follows: "Test Case" is "Good Test", "Time Ran" is "2/19/2018 11:34:03 PM", "Running User" is "coppers4@gmfuture.net", and "Outcome" is "Fail". At the bottom left of the notification area is a "Reply" button with a left-pointing arrow.

PlatoConnector 11:34 PM

 **Test Case Ran**
On Project

Test Case Good Test
Time Ran 2/19/2018 11:34:03 PM
Running User coppers4@gmfuture.net
Outcome Fail

← Reply

What's left to do?

- Elaborate on Connector
 - Added Directly from Teams
 - Need to Send Data From Backend to Connector
- Extend Bot Functionality
- Connect Tab to Bot Backend
- Create More Charts for Tab
 - Want to Display Different Metrics
 - Will Need More Data
 - Embed Each Chart in a Partial View
- Implement User Sessions and Teams Functionality



Questions?

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