

The science behind the report:

Manage Chromebooks from the same console, the same way regardless of the processor inside

This document describes what we tested, how we tested, and what we found. To learn how these facts translate into real-world benefits, read the report Manage Chromebooks from the same console, the same way—regardless of the processor inside.

We concluded our hands-on testing on May 20, 2019. During testing, we determined the appropriate hardware and software configurations and applied updates as they became available. The results in this report reflect configurations that we finalized on April 17, 2019 or earlier. Unavoidably, these configurations may not represent the latest versions available when this report appears.

# System configuration information

The table below presents detailed information on the systems we tested.

System	HP Chromebook <sup>™</sup> 11A with AMD A4-9120C processor	HP Chromebook 11A with Intel® Celeron® N3350 processor	Acer® Chromebook Spin 311 (R721T) with AMD A4-9120C processor	Acer Chromebook Spin 11 (C733) with Intel Celeron N3350 processor			
Processor							
Vendor	AMD	Intel	AMD	Intel			
Model number	A4-9120C	Celeron N3350	A4-9120C	Celeron N3350			
Core frequency (GHz)	1.6	1.1	1.6	1.1			
Number of cores	2	2	2	2			
Cache (MB)	2	2	2	2			
Memory							
Amount (GB)	4	4	4	4			
Туре	LPDDR4	LPDDR4	DDR4	DDR4			
Speed (MHz)	2,400	2,400	2,400	2,400			
Integrated graphics							
Vendor	AMD	Intel	AMD	Intel			
Model number	Radeon R4	HD Graphics 500	Radeon R4	HD Graphics 500			

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Storage							
Amount (GB)	16	16	32	32			
Туре	SSD	SSD	SSD	SSD			
Connectivity/expansion							
Wireless internet	802.11ac Dual Band	802.11ac Dual Band	802.11ac	802.11ac			
Bluetooth	4.2	4.2	4.2	4.2			
USB	2 x USB 3.1 2 x USB Type-C	2 x USB 3.1 2 x USB Type-C	2 x USB 3.0 2 x USB Type-C	2 x USB 3.0 2 x USB Type-C			
Video	1 x HDMI	1 x HDMI	N/A	N/A			
Battery							
Туре	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-polymer			
Size	Integrated	Integrated	Integrated	Integrated			
Rated capacity (Wh)	47	47	37	60			
Display							
Size (in.)	11.6	11.6	11.6	14			
Туре	LED-backlit	LED-backlit	LED-backlit	LED-backlit			
Resolution	1366 x 768	1366 x 768	1366 x 768	1920 x 1080			
Touchscreen	No	No	Yes	Yes			
Operating system							
Vendor	Google™	Google	Google	Google			
Name	Chrome OS™	Chrome OS	Chrome OS	Chrome OS			
Build number or version	Version: 73.0.3683.88 (Official Build) (64 bit)	Version: 73.0.3683.88 (Official Build) (64 bit)	Version: 73.0.3683.88 (Official Build) (64 bit)	Version: 73.0.3683.88 (Official Build) (64 bit)			
Dimensions							
Height x width x depth (in.)	0.71x 12.04 x 8.2	0.71 x 12.04 x 8.2	0.9 x 11.7 x 8.1	0.6 x 12.8 x 8.9			
Weight (lbs.)	2.73	2.73	3.31	3.70			

## How we tested

We simulated a classroom environment by adding AMD A4-9120C processor- and Intel Celeron N3350 processor-powered HP Chromebook11A and 11" Acer Chromebook Spin devices to a G Suite-managed account. Once we added the Chromebooks to the administration panel, we compared management tasks on them using the following tests.

#### Installing a single application on a group of systems

- 1. Log into the Google administration panel.
- 2. In theAdmin console, go to Devices $\rightarrow$ Chrome management $\rightarrow$ App management.
- 3. Select the application. We installed Evernote<sup>®</sup>.
- 4. Select User settings.
- 5. Select the Organizational Unit containing the users or enrolled browsers for whom you want to install the application.
- 6. Under Force Installation, click the toggle to turn the setting on.
- 7. Click Save.

#### Installing multiple applications on a group of systems

- 1. Log into the Google administration panel.
- 2. From the Admin console Home page, go to Device Management.
- 3. On the left, click Chrome Management  $\rightarrow$  App Management.
- 4. In the search box, type the name of the applications. We installed Evernote, Lucidcharts, and MindMeister.
- 5. Select User Settings.
- 6. Select the Orgizational Unit for the install.
- 7. Click Save.

### Changing a setting on a group of systems

- 1. Log into the Google administration panel.
- 2. From the Admin console Home page, go to Device Management.
- 3. On the left, click Chrome $\rightarrow$ Device Settings.
- 4. Select the Organizational Unit to apply settings.
- 5. Under Sign-in Settings $\rightarrow$ Guest mode, select Do not allow Guest Mode.
- 6. Click Save.

#### Resetting a system to default

- 1. In Chrome, install the Chromebook Recovery Utility app.
- 2. Launch the app.
- 3. Click Get Started.
- 4. Click Select a model from a list, and select the appropriate manufacture and product.
- 5. Click Continue.
- 6. Insert the USB flash drive.
- 7. Use the drop-down menu to select the USB drive, and click Continue.
- 8. Click Create Now.
- 9. Once complete, disconnect the USB flash drive.
- 10. Press Esc and then the Power button. Let go of Power. Once the Recovery Message shows on screen, insert the USB flash drive. The recovery image should begin to transfer immediately.

#### Deprovisioning a group of systems

- 1. Log into the Google administration panel.
- 2. From the Admin console Home page, go to Device Management  $\rightarrow$  Chrome devices.
- 3. If the Filters pane on the left isn't open, click Filter to open it.
- 4. On the left, under By Status, select Provisioned.
- 5. On the left, click the organization the device is in.
- 6. Check the box next to the device you want to deprovision.
- 7. At the top, click More Actions $\rightarrow$ Deprovision.
- 8. Check the box to confirm that you understand the actions to re-enroll a device.
- 9. Select your deprovisioning reason.
- 10. Click Deprovision.



This project was commissioned by AMD.





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