

# Corellium for Government

Corellium provides government agencies and service providers access to a powerful platform for creating Arm-native virtual devices to support their mobile vulnerability research, app penetration testing, and malware analysis needs.

The Corellium Virtual Hardware platform enables never-before-possible testing and research on virtual iOS, Android, and IoT devices. Through high-accuracy, Arm-native virtualization, it empowers researchers and security experts with the cutting-edge technology they need to stay ahead in the cybersecurity arms race.

It's not an emulator; it's Arm on Arm virtualization.





Corellium is the world's most powerful virtual hardware platform for Arm-powered devices. It enables unprecedented levels of research, development, and testing.

## Mobile Vulnerability Research

Provide never-before-possible security vulnerability research for iOS and Android with deep forensics and introspection tools. High-accuracy, Arm-native models enable real security vulnerability discovery and exploit validation. This is not an emulator or simulator - it's Arm on Arm.

# **Mobile App Penetration Testing**

Virtualize devices for static (SAST) and dynamic (DAST) application security testing. Leverage a powerful suite of built-in tools to simplify OS, app, data, and network analysis and introspection.

# Mobile Malware & Threat Analysis

Enable security threat and research teams with advanced investigative capabilities on virtual iOS and Android devices. Arm your Security, IT and SOC teams with the cutting-edge tools they need to stay ahead of cyber threats.

#### **Industries**

- Government
- Service Providers
- Public Sector

#### Roles

- Vulnerability Researchers (CNO/CNE)
- Independent Verification & Validation (IV&V)
- Mobile Analysis

# Stay Ahead of Cyber Threats

Strengthen your defensive cybersecurity capabilities with in-depth research, testing, and analysis. Discover vulnerabilities and exploits before the bad actors do.

Advanced research

Examine vulnerabilities with powerful debugging, device state, and runtime hooking functionality.

- **High-fidelity testing** Leverage Arm-native models through high accuracy and fidelity virtualization, not emulation.
- Instant root access Easily jailbreak/root iOS and Android, including the latest versions and beta releases.
- **Dynamic testing** Analyze, trace, and log encrypted application traffic with built-in network monitoring tools.
- **Deep introspection** Assess software at the lowest levels with powerful OS, app, file, system call, and network tooling.
- **Tooling flexibility** Use our browser console and APIs with Frida, Binary Ninja, IDA Pro, Burp Suite, and all of your favorites.



# **Push Your R&D Forward**

Revolutionize and accelerate R&D on iOS, Android and IoT devices through hardware virtualization.

## **Workspace Security**

Manage and support your teams and their workflows through a centralized server solution that unlocks collaboration while providing visibility and control.

- ✓ Visibility Eliminate desktop-based R&D that is decentralized and poses security and compliance risks.
- Procurement Eliminate physical device procurement and risks by allocating virtual hardware resources to specific teams with user and project workspace management tools.
- Ocilaboration Quickly create and deploy pre-configured virtual devices across users and teams with one-click device snapshot, restore, and cloning functionality.

- Ochtrol Simplify onboarding, role-based access (RBAC), and offboarding through centralized administration.
- Sandboxing Sandbox with network-isolated virtual hardware for safer threat analytics and malware detonation.



#### **Government Proven**

Corellium technology has been extensively government battle-tested, designed from its inception to meet the most stringent security and compliance needs.

- agencies rely on Corellium virtualization technology for their critical security, compliance, and privacy research work.
- On-Site Maintain security compliance with a completely on-site and air-gapped solution. The Corellium platform is available as preconfigured, Arm-powered server appliances for centralized management and control.
- device virtual workloads, and enable defensive and offensive (CNE and CNO) research, exercises, and cyber range programs.
- platform is an excellent hands-on teaching platform for developing security skill sets and best practices, all through simple browsers.

#### **Extensible Platform**

The Corellium Virtual Hardware platform is based on our innovative Corellium Hypervisor for Arm (CHARM) technology and can support many types of Arm-powered device models:

- Included We provide iOS and Android virtual device models that are ready to go.
- standard device models.
- of your own IOT devices.



#### **Corellium Virtual Hardware Platform**



#### VIRTUAL DEVICES

Arm-powered phones and IoT devices with endless OS and model combinations.

#### **HYPERVISOR**

Corellium Hypervisor for Arm (CHARM) is a type 1 hypervisor and the only one of its kind.

#### **ARM SERVER**

Virtual models run on Arm, just like real devices, combining native fidelity with on-demand availability.

#### TOOLING

Simplified connection of IDE, debugging, network and security tools and comprehensive APIs.

#### CONTROL

Configure device buttons, sensors, location, environment, battery, device IDs, ports, cameras and mics.

#### X-RAY VISION

Powerful OS, app, file, system call, and console access and control.

#### INTROSPECTION

Advanced OS, kernel and boot control and tooling.

#### NETWORK ANALYSIS

HTTP/S traffic inspection, tracing, and logging.

#### REPLICATION

Snapshot, clone, and restore device states.

#### • TEAMING

Easy project workspace management and team collaboration.

#### ROOT ACCESS

Root or jailbreak devices instantly, no need to add code or apply security vulnerabilities.

## **Flexible Deployment Options**

# **Corellium Appliances**

Corellium's on-site appliances use the latest Ampere Altra Arm servers. On-site servers can be air-gapped for use in high-security locations.



### **Corellium Cloud**

Corellium's cloud service is hosted at AWS, using Amazon's Graviton Arm servers. Private AWS deployments are also supported.







# **Corellium Onsite Solutions**

	Standard Mobile App Testing	Enterprise Full-Stack Testing	Premium Advanced R&D
	<ul><li>Mobile App Pen-Testing</li><li>Mobile App DevOps</li><li>Physical Device Replacement</li></ul>	<ul><li>OS Security Research</li><li>App Compliance &amp; Privacy Testing</li><li>Mobile Security Training</li></ul>	<ul><li>Adv Vulnerability Research</li><li>Exploit Research (CNO/CNE)</li><li>Custom Model Development</li></ul>
Root/jailbreak any OS version	$\odot$	$\odot$	$\odot$
Device snapshot & cloning	$\odot$	$\odot$	$\odot$
Team & workspace management	$\odot$	$\odot$	$\odot$
Root file system access	$\odot$	$\odot$	$\odot$
Network traffic monitoring	$\odot$	$\odot$	$\odot$
Frida and Cydia integration	$\odot$	$\odot$	$\odot$
Process and system call tracing	$\odot$	$\odot$	$\odot$
Advanced device configuration	$\odot$	$\odot$	$\odot$
Sensor and battery controls	$\odot$	$\odot$	$\otimes$
Virtual WiFi and SMS	$\odot$	$\odot$	$\odot$
GPU and H.26x acceleration	$\odot$	$\odot$	$\odot$
Biometric bypass	$\odot$	$\odot$	$\odot$
Debug accelerator	$\odot$	$\odot$	$\odot$
Restore iOS backups	$\odot$	$\odot$	$\odot$
RAM access and modification		$\odot$	$\odot$
Boot control and modification		$\odot$	$\odot$
Advanced network monitoring		$\odot$	$\odot$
Kernel patch management		$\odot$	$\odot$
Kernel debugging		$\odot$	$\odot$
Device tree configuration		$\odot$	$\odot$
iOS update support		⊘	
OS beta support			$\odot$
HyperTrace			$\odot$
Kernel hooking			$\odot$
IMEI and IMSI configuration			<b>⊘</b>
Custom firmware support			$\odot$

Free trials at Corellium.com