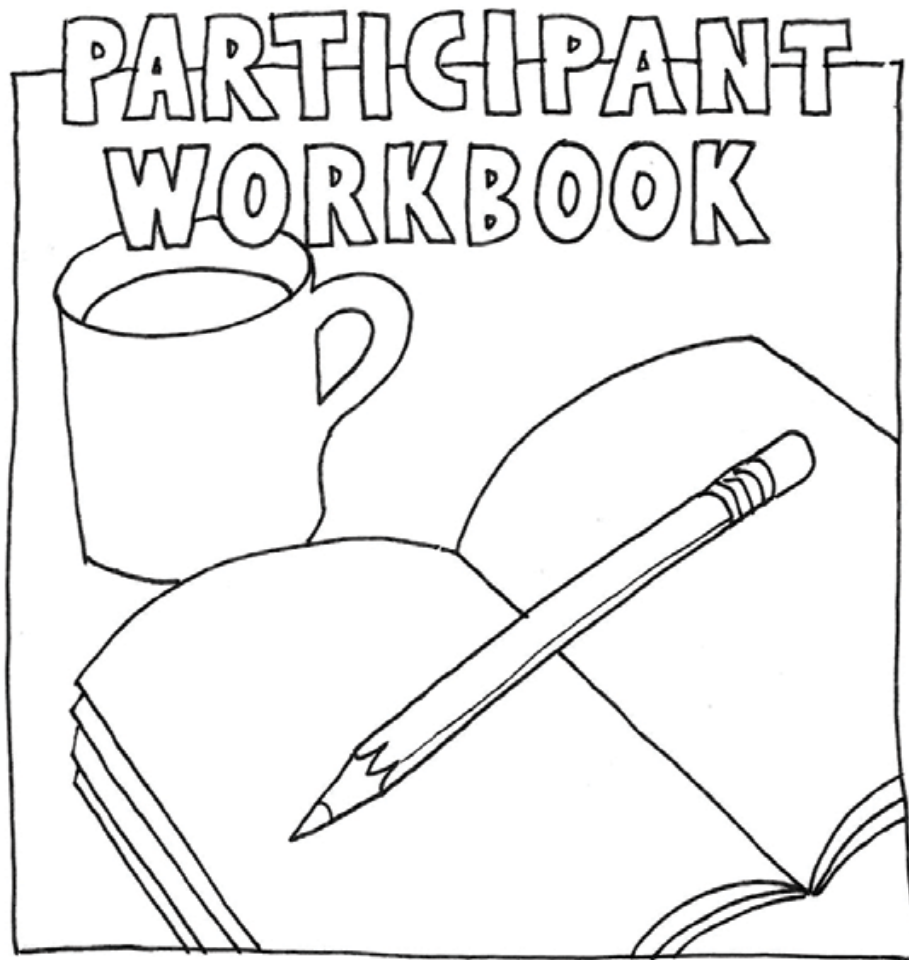




IT Boot Camp



Information Technology Overview

Information Technology



NOTES

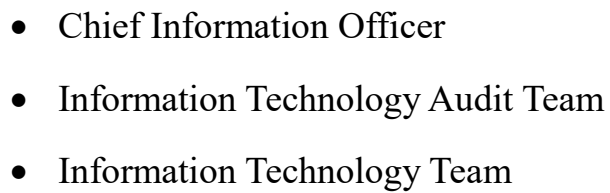
Training Overview



- Division of Technology (DoT)
- DoT Primary Responsibilities
- IT Audit Responsibilities to Tribal Customers

NOTES

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DoT Primary Responsibilities



**Internal
(IT Support & FOIA)**



**External
*(IT Audit)**

- ✓ Manage Agency Network
 - ✓ Fingerprint Application & Services
 - ✓ Delivers Technical Support Internally
 - ✓ Freedom of Information Act (FOIA)
 - ✓ Internal Control Audits
 - ✓ Information Technology Vulnerability Assessments
 - ✓ Technical Training
 - ✓ CJIS IT Security Audits
- *Focus

• **FOCUS**

NOTES

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Internal Controls Audit
25 C.F.R. § 543.20

Effective since 2013 for Class II Gaming

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NATIONAL INDIAN GAMING COMMISSION
MICS CLASS II - AUDIT CHECKLIST
INFORMATION TECHNOLOGY & IT DATA (ITD)

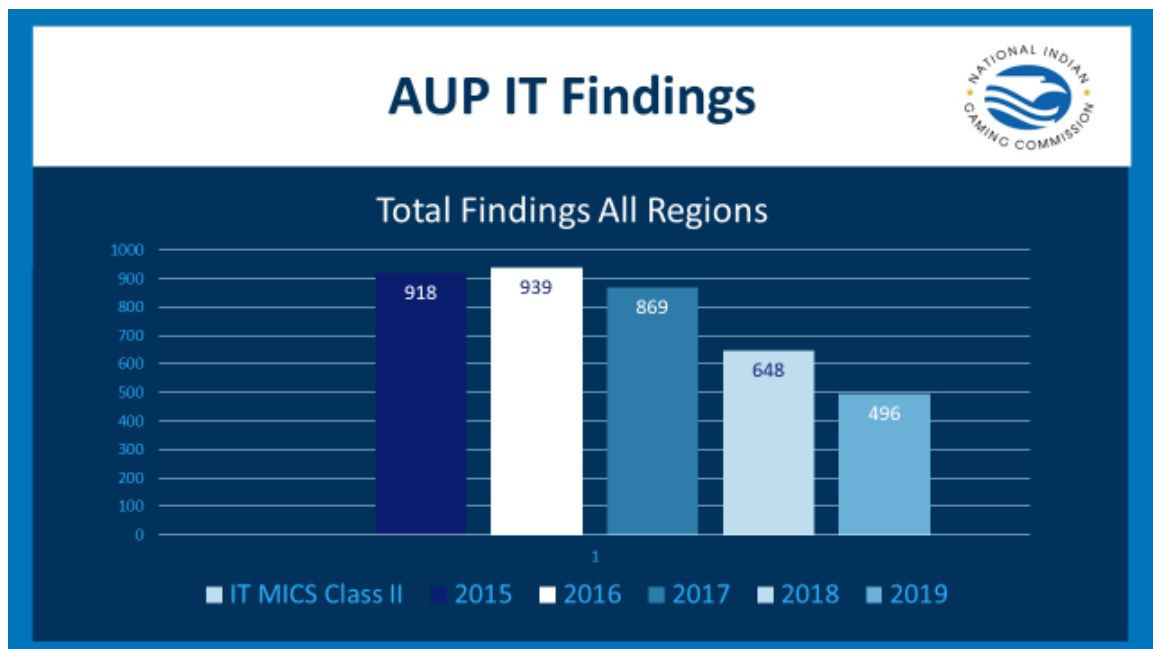
#	MCS QUESTION	YES	NO	REF	MCS	COMMENT
	§ 543.20 - Information Technology and Information Technology Data					
	(a) Supervision					
1.	Do controls identify the supervisory agent in the department or area responsible for ensuring that the department or area is operating in accordance with established policies and procedures? (Inquiry and review SICs)	_____	_____	_____	543.20(a)(1)	
2.	Is the supervisory agent independent of the operation of Class II games? (Inquiry and review other – organizational chart)	_____	_____	_____	543.20(a)(2)	
3.	Do controls ensure that duties are adequately segregated and monitored to detect procedural errors and to prevent the concealment of fraud? (Inquiry and review other – authorization lists)	_____	_____	_____	543.20(a)(3)	
4.	Are information technology agents with access to Class II gaming systems prevented from having signatory authority over financial instruments and payout forms? (Inquiry and review other – authorization lists)	_____	_____	_____	543.20(a)(4)	

https://www.nigc.gov/images/uploads/training/Toolkit_ITAudit_Rev12_4.pdf

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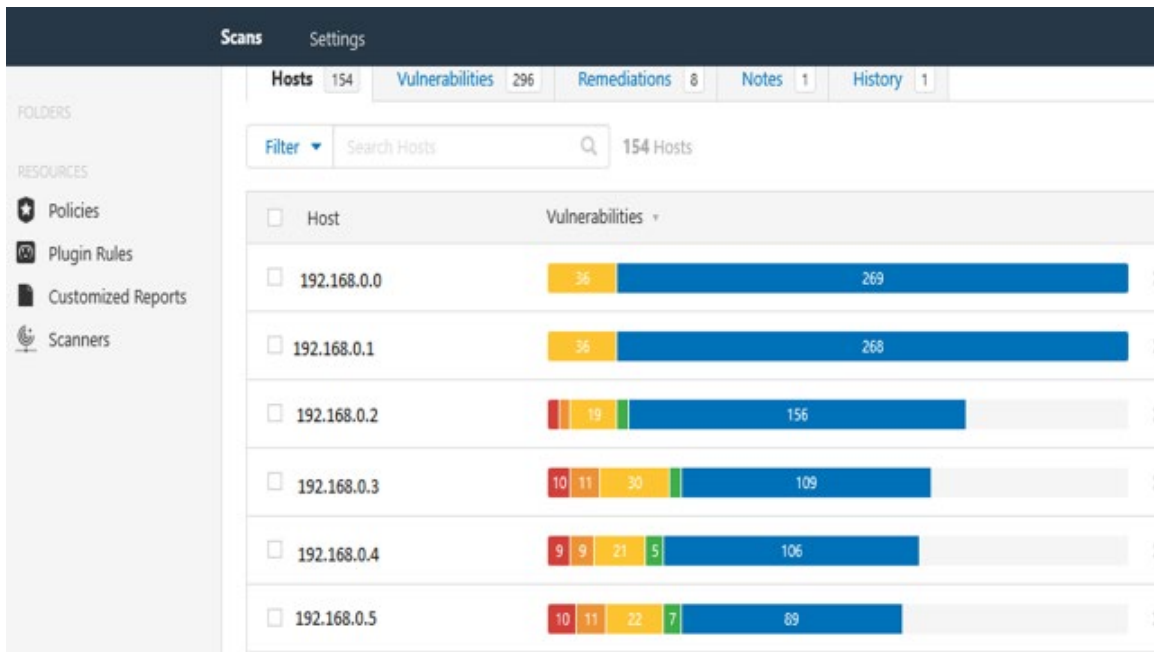
With the uptick of Cyber attacks especially in Indian Country, we need to ensure that the Operational IT side of the house has proper P&Ps in place.



Top 5 findings/standards for 2019: _____ of the top 5 findings centers around User Controls

- 543.20(f)(5) – User Controls - Access credentials of terminated users must be deactivated within an established time period approved by the TGRA. - _____
- 543.20(i)(2) – Incident Monitoring - All security incidents must be responded to within an established time period approved by the TGRA and formally documented. - _____
- 543.20(f)(3)(ii) – Access Credentials must be changed at an established interval approved by the TGRA;- _____
- 543.20(f)(4) – User Controls - Lost or compromised access credentials must be deactivated, secured or destroyed within an established time period approved by the TGRA;- _____
- 543.20(e)(1)(i) – Logical Security - Controls must be established and procedures implemented to protect all systems and to ensure that access to the following is restricted and secured:
 - Systems' software and application programs - _____

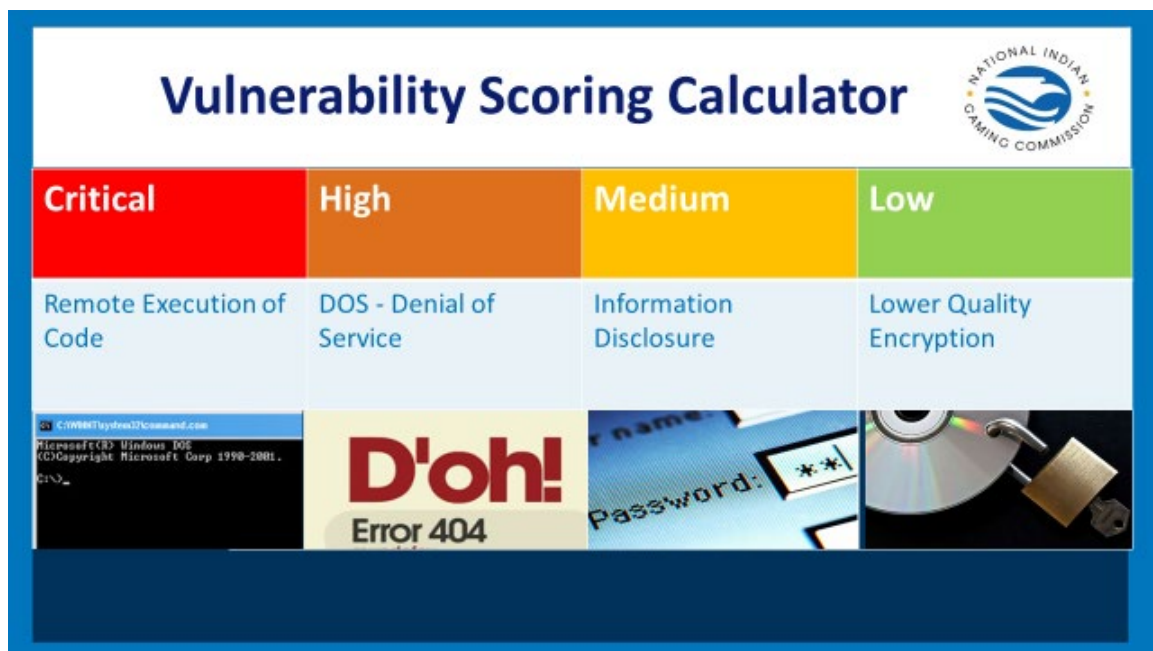
Information Technology Vulnerability Assessment



Sample scan during an ITVA

A vulnerability assessment is the **process of defining, identifying, classifying and prioritizing vulnerabilities in computer systems, applications and network infrastructures and providing the organization doing the assessment with the necessary knowledge, awareness and risk background to understand the threats** to its environment and react appropriately.

NOTE: _____



NIGC uses industry standard software to automate much of the process of finding vulnerabilities.

Tenable Nessus and **Metasploit** are two of the most well known utilities.

The respective software bases the severity of the vulnerabilities off published databases from:

- NIST (National Institute of Standards and Technology)
- CVSS (Common Vulnerability Scoring System)
- NVD (National Vulnerability Database)

See also:

<https://nvd.nist.gov/vuln-metrics/cvss/v2-calculator?vector=AV:N/AC:L/Au:N/C:P/I:P/A:P>

NOTES

CRITICAL Nessus Plugin ID 43604

Tenable calculates a dynamic VPR for every vulnerability. VPR combines vulnerability information with threat intelligence and machine learning algorithms to predict which vulnerabilities are most likely to be exploited in attacks. Read more about [what VPR is](#) and [how it's different from CVSS](#).

Vector: CVSS3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:H

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Common ITVA Concerns





Older Network Infrastructures

Windows XP/7/Old PC's

Missing Software Patches

Open Network Ports

1. **Older Network Infrastructures** – allow for _____ into player tracking data or cyber attacks
2. **Windows XP/7/Old PC's** – End of Life PCs with no _____ allowing for security concerns and accessibility by unwanted online attackers
3. **Missing Software Patches** – Updated software patches assist with keeping software up to date to not allow _____ identified by the software vendor
4. **Open Network Ports** – Unmanaged ports or just open ports with _____ allow for persons to possibly jump onto a network and cause harm.

NIGC Sample Vulnerability Report



Network Vulnerability Risk Assessment NIGC Internal Network

	Critical	High	Med	Low
General Scan	7	10	0	6
Credential Scan	6	9	6	0

Summary

The purpose of this scan is to have a monthly measurement of NIGC Internal Network health. September we included a credentialed scan. Explain a credentialed scan....

Noted Vulnerabilities

IBM DB2 10.5 < Fix Pack 3a, 4, 5, 6 Multiple Vulnerabilities (Bar Mitzvah)

Description

According to its version, the installation of IBM DB2 10.5 running on the remote host is prior to Fix Pack 6. It is, therefore, affected by multiple vulnerabilities such as: Denial of service, access to arbitrary files, [gain](#) root privileges, corrupt kernel memory, monitoring encrypted streams,

Solution

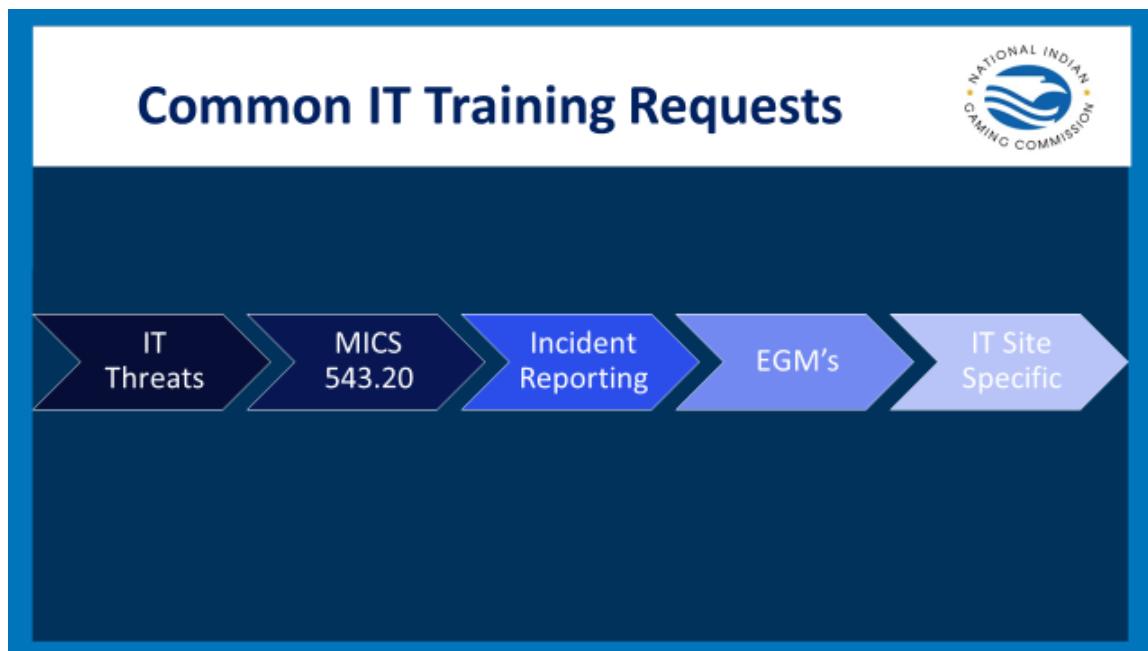
Apply IBM DB2 version 10.5 Fix Pack 6 or later.

For questions or comments please contact:

IT Audit @ itaudit@nigc.gov

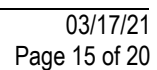
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Technical Training



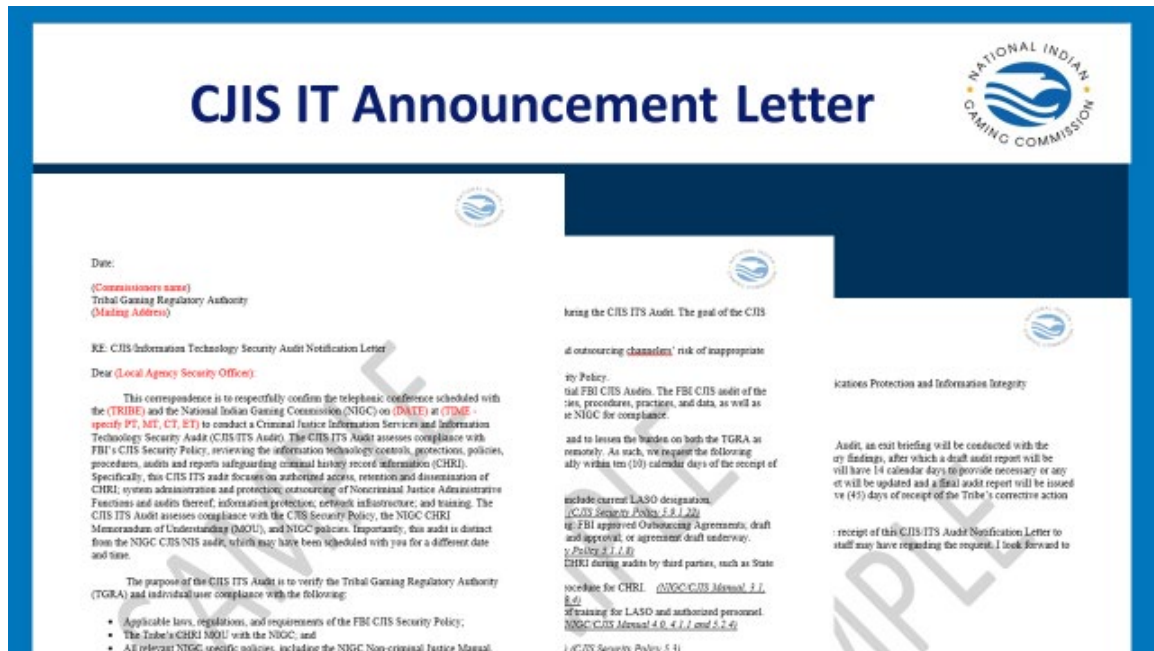
You can request trainings at www.nigc.gov. All training inquiries can be sent to traininginfo@nigc.gov.

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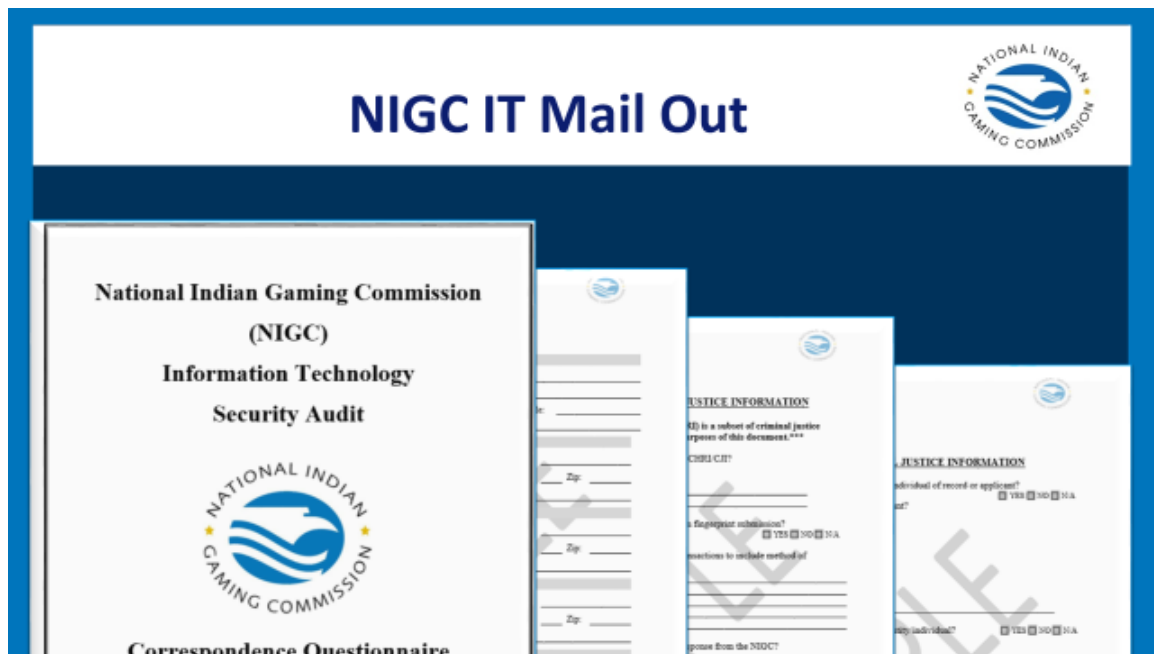


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NOTES



NIGC CJIS IT Audit Checklist



CJIS Policy Policy Area 1	Policy Area Information Exchange Agreements	Requirement	Compliant Yes No	Comments/Notes
5.1	Information Exchange Agreements	Does the information shared through communication mediums protected with appropriate security safeguards? Are the agreements established by entities sharing information across systems and communications mediums vital to ensuring all parties fully understanding and agreeing to a set of security standards? (Refer to NIGC MOU document)		
CJIS Policy Policy Area 13	Policy Area Mobile Devices	Requirement	Compliant	Comments/Notes
5.13	Mobile Devices	<p>This policy area describes considerations and requirements for mobile devices including smart phones and tablets. Mobile devices are not limited to a single form factor or communications medium. The requirements in this section augment those in other areas of the Policy to address the gaps introduced by using mobile devices.</p> <p>Does the agency: (i) establish usage restrictions and implementation guidance for mobile devices; and (ii) authorize, monitor, control wireless access to the information system?</p> <p>Wireless technologies, in the simplest sense, enable one or more devices to communicate without physical connections – without requiring network or peripheral cabling.</p>		

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IT Audit Recap



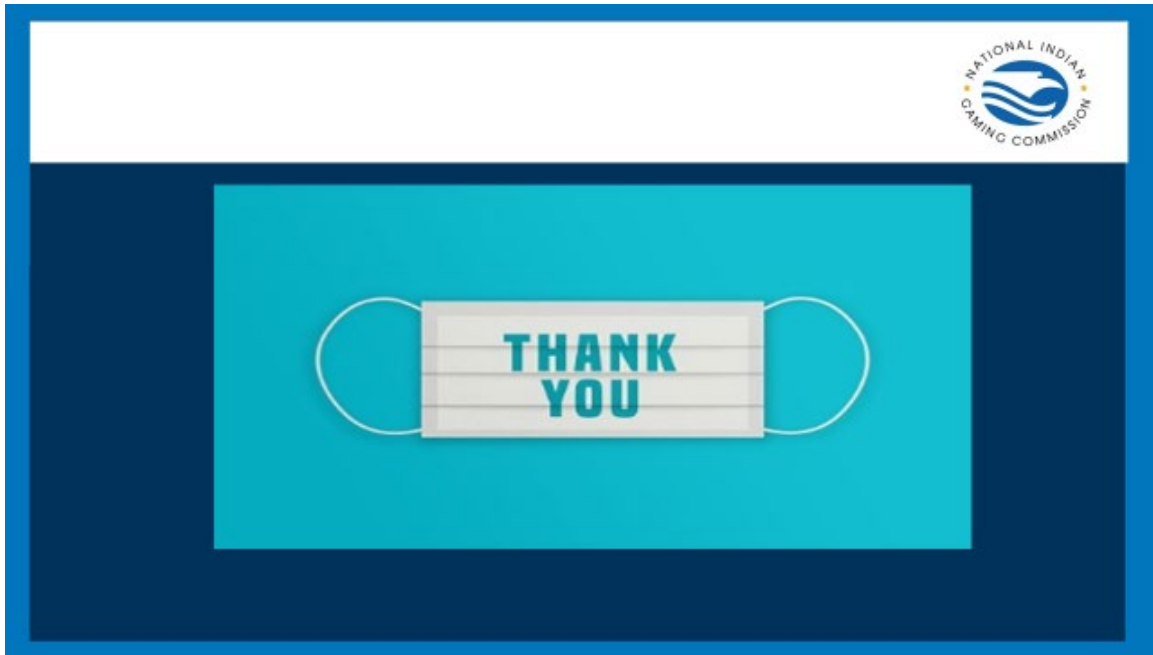
- ✓ Internal Control Audits (ICA)
- ✓ Information Technology Vulnerability Assessments (ITVA)
- ✓ Technical Training and Assistance
- ✓ CJIS IT Security Audits



- # IT Audit Recap
- 
- ✓ Internal Control Audits (ICA)
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NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.



Thank you for your participation and attending this session of the Information Technology Boot Camp!

After you log out you will receive a Survey. We ask that you complete the survey as the feedback helps us to get better at what we do!

We hope that you will join us for the next session.

NIGC Training can be reached at traininginfo@nigc.gov