



सुशासन

School of Good Governance And Policy Analysis

A Workshop on Website Quality, Accessibility and Security

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Websites & web-enabled applications Hosting and Security

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Websites & web-enabled Applications [Hosting & Security]

Guidelines for Indian Government Websites →

- ❖ NIC has developed Guidelines for Indian Government websites in accordance to the international standards to ensure that the website belongs to any constituent of the Government at any level is user friendly, secure and easy to maintain. The guidelines have been adopted by DARPG, Ministry of Personnel, Public Grievances & Pension, Government of India, as an integral part of Central Secretariat Manual of Office Procedure.
- ❖ All the Government Departments/Organizations are advised to follow these guidelines while developing or managing their websites or web-enabled applications.
- ❖ The Guidelines are made available on the website <http://web.guidelines.gov.in> and the same can be obtained by registering yourself on the website.
- ❖ [Compliance Matrix – Checklist for Government Websites](#)

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Cyber Security → Threats in cyber space remain (by & large) the same as in the physical world (ex. fraud, theft and terrorism). However, they are different due to 3 important developments

- ❖ Automation has made attacks more profitable
- ❖ Action at a distance is now possible
- ❖ Attack technique propagation is now more rapid and easier

→ In addition to these 3 important developments, there are 3 more trends that make an enterprise transparent and vulnerable

- ❖ Internet enabled connectivity
- ❖ Wireless networking
- ❖ Mobile computing

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Cyber Security – Myths (Facts) →

- ❖ Information Security is the concern and responsibility of the MIS/IT manager (All the ICT Users)
- ❖ Security Threats from outsiders are the greatest source of risks (Security Threats from Insiders are equally significant)
- ❖ Information Security is assured by safeguarding networks and the IT infrastructure (Not just sufficient, as Application and use of ICT infrastructure is equally vulnerable for security threats)
- ❖ Adopting latest technological solutions will increase security (Not just sufficient)
- ❖ The users will follow the rules, only send required input, cannot manipulate drop-down lists & cannot manipulate hidden fields (The user can try to cross the barriers and may try to pass un-expected inputs)

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Cyber Security – Myths (Facts) →

(Continued)

- ❖ The Application has all enforcements - Client side Java scripts will take care of validation in addition to Username & Password for Restricted Areas (The intruder may try to hack the information while transmission from Client to Server, thus Server end validation is equally essential).
- ❖ Application is deployed under SSL (SSL only guarantees communication Security – It even guarantees that our attacks are even delivered securely)
- ❖ Technology will take care of security – Firewall will prevent all attacks - IDS/IPS can detect any attacks (Firewalls, IDS, IPS, etc. guard you on the network perimeter, however, application attacks are not stopped)
- ❖ Application is internal or there are very few transactions happening on the application (It is just a matter of time that a malicious user exploits the application)

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Cyber Security – Advantage!! Attackers →

- ❖ Lack of awareness - Ignorance on Security
- ❖ More focus on functionality
- ❖ Time-to-Market
- ❖ Growing Complexity
- ❖ Increasing Business Demand – More inclination on “getting the job done”

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Cyber Security – Reluctance →

- ❖ May be, the stakeholders including customers have not yet started insisting on an assurance
- ❖ Many organizations would not want to implement strong security measures thinking that they do not have anything that others would want
- ❖ Probably what they do not realize is that they could become launch pads for attacks on others (Need to be a good neighbor)
- ❖ Besides this, there is a very difficult choice between convenience and security measure
- ❖ Or simply, their cyber space is empty

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Cyber Security – Emphasis → With security assurance, we are not intending to make the system 'hacker proof', but devise a mechanism which can protect the system to a large extent.

- ❖ Anticipate potential problems
- ❖ Pre-empt through proactive measures
- ❖ Protect against considerable damages
- ❖ Ensure recovery and restoration

→ 'It is all about the ability to expect the expected before we are ready to expect the unexpected'

→ **“Breaks are built in your Car not to stop you from driving or fast driving, but to allow you move as fast as you can”** → Thus it is necessary as well as mandatory to ensure that breaks of your Car are perfect and regularly checked up.

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Security Assurance Framework – Highlights & Control Emphasis

depends on the kind of Environment → Covers three kinds of web & networking environment, depending on types of risks & related business impact

❖ Low Risk

- ❖ In general, the environment caters to providing information to users
- ❖ 'Awareness' - know your security concerns and follow best practices

❖ Medium Risk

- ❖ In general, the environment caters to providing information to users and allowing some amount of interaction including non-commercial transactions
- ❖ 'Awareness & Action' – Proactive strategies leave you better prepared to handle security threats and incidents

❖ High Risk

- ❖ In general, the environment caters to providing information to users, allowing interaction and commercial transactions including on-line payments
- ❖ 'Awareness, Action and Assurance' – Since security failures could be disastrous and may lead to unaffordable consequences, assurance (basis of trust & confidence) that the security controls work when needed most is essential.

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Cyber Security – IT Security Audit of Websites/Web-enabled Applications →

- ❖ In case, Website/Web-enabled Application is hosted on Server owned by ICT Infrastructure provider, then the responsibility of Security of Server system, Operating System, Application Software, backend Database, Storage, Network, etc. rests on ICT Infrastructure provider.
- ❖ Web Contents/Web-enabled Applications, Backend Database, etc. are owned and under the control of the User Organization, thus the responsibility to get these audited by a CERT-In empanelled Information Security Auditors rests of User Organization.

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Cyber Security – NIC Setup →

- ❖ ICT infrastructure deployed by NIC in Data Centres (National as well as State Data Centres) are under secured environment, as NIC follows CERT-In guidelines in deployment & maintenance of IT infrastructure in its Data Centres.
- ❖ Websites/Web-enabled Applications hosted/deployed on NIC Production Servers considered to be secured, provided security guidelines are followed in development of related website/web-enabled applications by the developing agency and appropriate security audits are conducted by the concerned user organization to secure the deployed websites/applications.
- ❖ No Website/Web-enabled application can be hosted on NIC Server, without obtaining security clearance from the Security Auditor. Security audit of Website/Web-enabled

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Cyber Security – NIC Setup →

Static Websites

- ❖ For the convenience of User Organizations, NIC has designed the purely Static Websites for some organizations (under value addition services) in active support & consultation with the concerned organizations.
- ❖ Also initiated self Certification for such **purely static** websites and obtained security clearance before the release of these websites on NIC Production Server.
- ❖ However, the responsibility of further updation/upgradation/revision will rest on the concerned user organization.
- ❖ NIC has extended FTP over VPN (Virtual Private Network) facility to most of the users for the maintenance of their websites independently using their own Client machine (computer with Internet Connectivity) without approaching to NIC.

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Cyber Security – NIC Setup →

Static Websites (Continued)

- ❖ For this purpose, NIC also has provided required User-ID/Password related to allocated Web-Space and Database pertaining to the website/web-enabled application of the concerned User Organizations.
- ❖ Thus all such Users maintain their website/web-enabled application independently as per their need. Therefore, all such user organizations should ensure that the web-contents, being uploaded in the allocated web-space under their website, are also secured as per security guidelines, available on CERT-In website.
- ❖ Client System being used for managing Server area (Web, Application & Database) should be virus-free.

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Cyber Security – NIC Setup →

Dynamic Websites (Consisting Web-enabled Application)

- ❖ Any application being loaded on the server should be cleared by the empanelled Security Auditor.
- ❖ Any addition of dynamic contents to the existing (running) website or change in application logic of web-enabled application attracts security re-audit, which is to be taken-up by the User Organization.
- ❖ Subsequent, audit of website/web-enabled application may be performed in a regular intervals for any new vulnerability.
- ❖ Government of India has created a panel of IT Security Auditors, which is available on the website URL <http://www.cert-in.org.in/security-auditors.htm>. Guidelines for conducting third party audit are made available on the website of NIC, Madhya Pradesh for the convenience of the users.
- ❖ No roll of NIC in selection of Security Auditor from the panel or negotiating with them. NIC does not have charging criteria for audit of any website or Web-enabled application.
- ❖ Security Audit may be included as part of System Development Cycle for any project, downloaded to any agency.

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Cyber Security – Desktop Security →

- ❖ Avoiding change in IP address of the Client systems
- ❖ Use wireless networks with securely
- ❖ Preventing unauthorized software/freeware
- ❖ Enforcing Password policy & use strong passwords
- ❖ Locking of Desktop by password protected screen savers
- ❖ Block the use of unauthorized USB drives
- ❖ Install and maintain updated anti-virus software at gateway and desktop level
- ❖ Install personal firewall
- ❖ Configure client system with least privileges and use Administrator account judiciously
- ❖ Keep up-to-date patches and fixes on the operating system and application software

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Cyber Security – Desktop Security →

(Continued)

- ❖ Exercise caution while opening unsolicited emails and do not click on a link embedded within
- ❖ Disable Active scripting except for trusted websites
- ❖ Browse the Internet safely and disable Unrecognized BHO (Browser Helper Object)
- ❖ In case your financial or personal information is compromised, immediately contact your financial institution/ Bank and report the same
- ❖ Irrespective of authentication method, ensure that online transactions are conducted through a trusted and clean system
- ❖ Learn what to do if something goes wrong

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Cyber Security – Desktop Security →

- ❖ Follow the security alerts and advisories of CERT-In: www.cert-in.org.in
- ❖ Follow security guidelines issued by CERT-In:
 - ❖ Securing Home Computers: <http://www.cert-in.org.in/knowledgebase/guidelines/cisg-200503.htm>
 - ❖ Anti Virus Policy & Best Practices: <http://www.cert-in.org.in/knowledgebase/guidelines/cisg-2003-05>.
 - ❖ System Security Guidelines: <http://www.cert-in.org.in/knowledgebase/guidelines/cisg-2003-04>.

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Web Hosting on NIC Server →

- ❖ Initiation & supply of filled-in form for Website Registration, NIC.IN Domain Registration, Digital Certificate Request (VPN), etc.
- ❖ Supply of softcopy of Web Contents
- ❖ If website contents are in Hindi, use UNICODE-based fonts (Mangal) for creation of the website.
- ❖ Use RDBMS (as per the available common platform at Internet Data Centre) as back-end instead of simple database for development of web-enabled application.
- ❖ Security clearance is mandatory before hosting any new website on NIC Server in the public domain.
- ❖ Hosting Intimation to the User

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Domain under GOV.IN [www.registry.gov.in/] →

NIC maintain only two domains i.e., NIC.IN and GOV.IN. NIC.IN domain is exclusively for websites/web-enabled applications belongs to NIC, whereas, GOV.IN domain is for all the websites/web-enabled applications of Government Departments/Organizations. However, the website/web-enabled application can also be made available on NIC.IN domain only for initial hosting & maintenance purpose.

As per Government of India Policy, user has to obtain desired domain [i.e., GOV.IN for Government Departments/Organizations] for releasing the website in the public domain.

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Domain under GOV.IN [www.registry.gov.in/] →

Registration of Domain

- ❖ Registration of 3rd level domain under GOV.IN is to be taken up and handled by the concerned user directly with the Domain Registrar.
- ❖ Registration of 4th level domain under MP.GOV.IN is being coordinated by NIC, MPSC, Bhopal. The following processes involved in the registration and activation of the domain.
 - ❖ Forward filled-in MP.GOV.IN Domain Registration Form.
 - ❖ NIC will register the domain, as per the details provided in the form. After that a Domain Registration ID is forwarded by Domain Registrar to the User as well as to NIC, MPSC, Bhopal, through E-mail.
 - ❖ This Domain Registration ID to be filled-in for issuing Authorization letter to Secretary (IT) by the HoD of that user organization.

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Domain under GOV.IN [www.registry.gov.in/] →

Registration of Domain (Continued 4th level Domain)

- ❖ The Secretary (IT), who has been nominated as Authorized persons by the State Government to control the domain MP.GOV.IN, will intern issue Authorization letter to Domain Registrar (New Delhi).
- ❖ Any domain under MP.GOV.IN can be activated by NIC(HQ) only after the receipt of Authorization letter, which is issued by the Secretary (IT).
- ❖ The User organization should get the Authorization letter issued by the Secretary (IT) and provide scanned copy of the same to NIC, MPSC, Bhopal to expedite activation of the desired domain at the earliest.

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Tenders INDIA Portal [www.tenders.gov.in] →

- ❖ The Government Tenders Portal provides information about the various NITs/Tenders/Auctions issued by Central Government Ministries/ Departments, Organizations and State/UT Governments in India.
- ❖ This Service is being offered by NIC to facilitate faster dissemination and easy access to information related to the NITs/Tenders/Auctions, issued by Government agencies.
- ❖ Two-level password protected user entry facility, through which an authorized user can upload the NIT/Tender/Auction related to their organization.
- ❖ The NIT/Tenders/Auction published on Tenders INDIA Portal can also be made available by creating a web-linked on the website of User's Organization.
- ❖ The Services can be availed by submitting one page subscription Form.

Websites & web-enabled Applications [Hosting & Security]

Technical Topics in the following Sessions →

- ❖ Network Security/virus
- ❖ FTP over VPN – Secured way for maintenance of Websites & Web-enabled Applications
- ❖ Security Guidelines for websites & Web-enabled Applications



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Madhya Pradesh Portal

New/Updated From Madhya Pradesh Portal

6th Pay Commission - Notification

Zila Panchayat, Ratlam

Union Budget 09~10 (Interim)

Singrauli District

CDA, Jabalpur

NICMP E-mail
(@mp.nic.in)

User ID

Password

[-< Check Email ->](#)

NIC E-mail
(@nic.in)

[Important Links](#)

MPonline

India Image

india.gov.in
The national portal of India

Examination Results
Madhya Pradesh

DISHA
NIC Madhya Pradesh

ig the unreached - From Digital Divide to Digital Opportunities for Grassroots Development!!!

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Citizen Services

- Air/ Rail Travel
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- Bimari Jankari
- BSNL Telephone Directory
- Cause List
- Citizen Charter
- Consumer Welfare Forms
- FAQ on Income Tax
- Market (Mandi) Rates
- Opportunities
- Passport Enquiry
- Pension Help-line
- Right to Information Samachar
- Tourist Information
- Weather Report

Deptt./Orgns./Institutions

- Government Departments
- Public Enterprises
- Institutions/Organizations
- Districts/Divisions
- Educational Institutions
- Local Bodies

About the State

- History
- Profile
- Tourism
- Budget



NIC Madhya Pradesh

Note : Some of the contents are in Hindi. Please download the Hindi Fonts



MPBSE : DEd - IInd Year (IInd Chance) Exam Dec

New/Update

- 6th Pay Commission - Notification
- Zila Panchayat, Ratlam
- Union Budget 09~10 (Interim)
- Singrauli District
- CDA, Jabalpur
- CEO, ZPs revised E-mail List
- Employees Gradation List

Other Useful Information

- Reports/Publications
- Acts, Rules & Notifications
- Thematic Maps/Charts
- Annual/Five Year Plans
- Policies
- Who's who
- Initiatives



Sat Mar 28. 1:39:29 PM

Mar. 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
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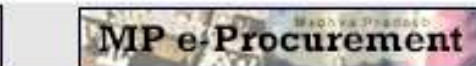
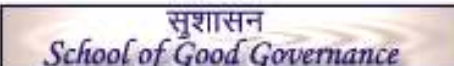
NIC E-mail (mail.nic.in)

User ID

Password

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