



Sertifikasi IT



Masyarakat dan Etika Profesi

Mengapa perlu sertifikasi?

- ▶ **Credibility**
 - ▶ Bukti kemampuan atau kepakaran pada bidang pekerjaan tertentu.
- ▶ **Marketablity**
 - ▶ Meningkatkan nilai jual karyawan di dunia kerja, menunjang jenjang karir.
- ▶ **Personal and professional development**
 - ▶ Mengikuti perkembangan teknologi, akses ke resource pembelajaran yang lebih luas.



Bagaimana memilih sertifikasi yang tepat?

- ▶ Apa yang dibutuhkan dalam pekerjaan?
 - ▶ Apakah dalam pekerjaan terkait penggunaan hardware atau software dari vendor tertentu?
- ▶ Tujuan karir
- ▶ Ketertarikan/ minat

“your certification path should reflect your career path”



Contoh Sertifika

02. 0769208



BADAN NASIONAL
SERTIFIKASI PROFESI
INDONESIAN PROFESSIONAL
CERTIFICATION AUTHORITY

SERTIFIKAT KOMPETENSI CERTIFICATE OF COMPETENCE

No. 72101 3121 0009584 2013

Dengan ini menyatakan bahwa,
This is to certify that,

Herni Agustin

No. Reg. TIK 002 04349 2013

Telah kompeten untuk Unit Kompetensi :
Is competent in the following Unit(s) of Competency :

- | | |
|-------------------|-------------------|
| 01. TIKOP0100101 | 06. TIKOP0201201A |
| 02. TIKOP0200201 | 07. TIKOP0201301A |
| 03. TIKOP0200801A | 08. TIKOP0201401 |
| 04. TIKOP0200701A | 09. TIKOP0201501 |
| 05. TIKOP0201101A | |

Pada bidang pekerjaan :
In the area of :

9 dari 9 unit Advance Office
9 of 9 units Advance Office

Sertifikat ini berlaku untuk 2 (dua) Tahun
This certificate is valid for 2 (two) Years

Jakarta, 12 September 2013

Atas nama (On behalf of) BNSP

Lembaga Sertifikasi Profesi Telematika

Jenis Sertifikasi

- ▶ **Sertifikasi berorientasi produk**

- ▶ Dikeluarkan oleh vendor besar terkait dengan perangkat lunak atau perangkat keras yang diproduksi oleh vendor tersebut.
- ▶ Contoh: Microsoft, Oracle, Cisco, Novell

- ▶ **Sertifikasi berorientasi profesi**

- ▶ Diekluarkan terkait dengan profesi TI di bidang tertentu.
- ▶ Contoh: ICCP (Institute for Certification of Computing Professional), CompTIA (Computing Technology Industry Association)





Microsoft Certification

-
- ▶ Microsoft Technology Associate (MTA)
 - ▶ Microsoft Certification Solution Associate (MCSA)
 - ▶ Microsoft Certified Solutions Expert (MCSE)
 - ▶ Microsoft Certified Solutions Developer (MCSD)
 - ▶ Microsoft Office Specialist (MOS) Certification



Microsoft Technology Associate (MTA)

- ▶ Penguasaan konsep teknologi secara fundamental (introductory certification)
- ▶ Jenis:
 - ▶ MTA: IT Infrastructures
 - ▶ Ditujukan untuk profesional yang ingin berkarir di infrastruktur dekstop atau server, maupun private cloud computing
 - ▶ MTA: Database
 - ▶ Ditujukan untuk profesional yang ingin berkarir di bidang data platform administration atau business intelligence.
 - ▶ MTA: Developer
 - ▶ Software developer, persiapan sertifikasi MCSD



Microsoft Certification Solution Associate (MCSA)

- ▶ Penguasaan core technical skill.
- ▶ Merupakan prasyarat MCSE expert-level.
- ▶ Jenis:
 - ▶ MCSA:Windows Server 2012
 - ▶ MCSA:Windows Server 2008
 - ▶ MCSA:Windows 10
 - ▶ MCSA:Windows 8
 - ▶ MCSA: SQL Server 2012/2014
 - ▶ MCA: SQL Server 2008
 - ▶ MCSA: Office 365
 - ▶ MCSA: Linux on Azure



Microsoft Certified Solutions Expert (MCSE)

- ▶ The globally recognized standard for IT professionals.
- ▶ Jenis
 - ▶ MCSE: Server Infrastructure
 - ▶ validates that you have the skills needed to run a highly efficient and modern data center
 - ▶ computer support specialist and information security analyst
 - ▶ MCSE: Private Cloud certification
 - ▶ Prove your expertise in managing and implementing Microsoft private cloud computing technologies.
 - ▶ server administrator, systems programmer, and network manager.
 - ▶ MCSE: Enterprise Devices and Apps
 - ▶ validates that you have the skills needed to manage devices in today's bring-your-own-device (BYOD) enterprise.



MCSE (cont.)

- ▶ MCSE: Data Platform
- ▶ Demonstrate your broad skill sets in SQL Server administration and in building enterprise-scale data solutions both on-premises and in cloud environments.
 - ▶ Querying Microsoft SQL Server 2012/2014
 - ▶ Administering Microsoft SQL Server 2012/2014 Databases
 - ▶ Implementing a Data Warehouse with Microsoft SQL Server 2012/2014
 - ▶ Developing Microsoft SQL Server Databases
 - ▶ Designing Database Solutions for SQL Server



MCSE (cont.)

- ▶ MCSE: Business Intelligence certification
- ▶ Prove that you have the skills and techniques needed to design, build, and deploy SQL Server business intelligence (BI) solutions that deliver more data to more people across the organization.
 - ▶ Querying Microsoft SQL Server 2012/2014
 - ▶ Administering Microsoft SQL Server 2012/2014 Databases
 - ▶ Implementing a Data Warehouse with Microsoft SQL Server 2012/2014
 - ▶ Implementing Data Models and Reports with Microsoft SQL Server
 - ▶ Designing Business Intelligence Solutions with Microsoft SQL Server



MCSE (cont.)

▶ MCSE: Messaging

- ▶ Validate your ability to move your company to the cloud, increase user productivity and flexibility, reduce data loss, and improve data security for your organization.
 - Managing Office 365 Identities and Requirements
 - Enabling Office 365 Services
 - Designing and Deploying Microsoft Exchange Server 2016.

▶ MCSE: Communication

- ▶ Validate your expertise in creating a consistent communications experience for your organization and in connecting your colleagues to people around the world.
 - Managing Office 365 Identities and Requirements
 - Enabling Office 365 Services
 - Deploying Enterprise Voice with Skype for Business 2015
 - Core Solutions of Microsoft Skype for Business 2015



MCSE (cont.)

- ▶ MCSE: SharePoint
- ▶ Earn recognition for your expertise in helping a company organize, sync, collaborate, and share information across the organization.
 - ▶ Managing Office 365 Identities and Requirements
 - ▶ Enabling Office 365 Services
 - ▶ Core Solutions of Microsoft SharePoint Server 2013
 - ▶ Advanced Solutions of Microsoft SharePoint Server 2013



Microsoft Certified Solutions Developer (MCSD)

- ▶ The globally recognized standard for developers
- ▶ Prove your ability to build innovative solutions across multiple technologies, both on-premises and in the cloud.



MCSD (cont.)

- ▶ **MCSD: Universal Windows Platform**

- ▶ Demonstrate your expertise at planning the designing and implementing of Universal Windows Platform apps that offer a compelling user experience, leverage other services and devices, and use best coding practices to enhance maintainability.

- ▶ **MCSD: Windows Store Apps**

- ▶ Demonstrate your expertise in designing and developing fast and fluid Windows 8 apps. There are two paths to achieving this type of Windows certification—using HTML5 or C#.



MCSD (cont.)

▶ MCSD: Web Applications

- ▶ Get recognized for your expertise in creating and deploying modern web apps and services.
 - ▶ Programming in HTML5 with JavaScript and CSS3
 - ▶ Developing ASP.NET MVC Web Applications
 - ▶ Developing Microsoft Azure and Web Services

▶ MCSD: SharePoint Applications

- ▶ Demonstrate your expertise at designing and developing collaboration applications with Microsoft SharePoint.



MCSD (cont.)

- ▶ **MCSD:Azure Solutions Architect**

- ▶ Microsoft Azure is the cloud for modern business.
- ▶ For your expertise covering the full breadth of architecting, developing, and administering Azure solutions.

- ▶ **MCSD:Application Lifecycle Management**

- ▶ For your expertise in managing the entire application development lifecycle.
- ▶ Qualify you for such jobs as developer, applications engineer, and IT project manager.



Microsoft Office Specialist (MOS) Certification

- ▶ Demonstrate that you have the skills needed to get the most out of Office.
- ▶ Holding a MOS certification can earn an entry-level business employee.
 - ▶ MOS: Microsoft Office Word 2013
 - ▶ MOS: Microsoft Office Excel 2013
 - ▶ MOS: Microsoft Office PowerPoint 2013
 - ▶ MOS: Microsoft Office Outlook 2013
 - ▶ MOS: Microsoft Office Access 2013
 - ▶ MOS: Microsoft SharePoint 2013
 - ▶ MOS: Microsoft Office OneNote 2013



Older Certification

- ▶ **Microsoft Certified IT Professional (MCITP) → MCSE**
 - ▶ proves that you have the comprehensive set of skills to perform a particular IT job role, such as database administrator or enterprise messaging administrator.
- ▶ **Microsoft Certified Technology Specialist (MCTS) → MCSA**
 - ▶ proves your skills on a particular Microsoft technology, such as the Windows operating system, Microsoft Exchange Server, Microsoft SQL Server, or Microsoft Visual Studio.
- ▶ **Microsoft Certified Professional Developer (MCPD) → MCSD**
 - ▶ This certifications will not be updated for versions later than Visual Studio 2010.
- ▶ **The Microsoft Certified Database Administrator (MCDBA) → MCSE: Data Platform or MCSE: Bussiness Intellegence**
 - ▶ provides proof of your ability to design, implement, and manage SQL Server 2000 databases.



Cisco Sertification

Certification Tracks		Entry	Associate	Professional	Expert	Architect
Cloud			CCNA Cloud	CCNP Cloud		
Collaboration			CCNA Collaboration	CCNP Collaboration	CCIE Collaboration	
Data Center			CCNA Data Center	CCNP Data Center	CCIE Data Center	
Design	CCENT		CCDA	CCDP	CCDE	CCAr
Industrial			CCNA Industrial			
Routing and Switching	CCENT		CCNA Routing and Switching	CCNP Routing and Switching	CCIE Routing and Switching	
Security	CCENT		CCNA Security	CCNP Security	CCIE Security	
Service Provider			CCNA Service Provider	CCNP Service Provider	CCIE Service Provider	
Wireless	CCENT		CCNA Wireless	CCNP Wireless	CCIE Wireless	



Contoh Oracle Certification

- ▶ **Oracle Applications Certifications**

- ▶ Sertifikasi untuk berbagai aplikasi Oracle, seperti Siebel, Oracle eBusiness Suite, PeopleSoft dan sebagainya.

- ▶ **Oracle Cloud Certification**

- ▶ Sertifikasi untuk pengetahuan dan penerapan cloud computing dengan teknologi dari Oracle, misalnya Oracle Customer Experience Cloud, Java Cloud, Oracle Database Cloud.

- ▶ **Oracle Database Certifications**

- ▶ Sertifikasi untuk kemampuan dalam pengelolaan database, antara lain Database Application Development, Oracle Database.

- ▶ **Oracle Operating Systems Certifications**

- ▶ Sertifikasi untuk pengetahuan dan keahlian tentang sistem operasi Oracle, misalnya Oracle Linux, Oracle Solaris.

- ▶ **Oracle Enterprise Management Certification**

- ▶ Sertifikasi untuk penguasaan produk Oracle yang digunakan untuk keperluan enterprise management.



CompTIA Certification

CompTIA Certification

- ▶ **CompTIA (Computing Technology Industry Association)**
 - ▶ Asosiasi bersifat non-profit yang terdiri atas berbagai industri yang bergerak di bidang teknologi komputer.
- ▶ Bidang yang disertifikasi antara lain computing support, networking, security, open-source (Linux) development, cloud dan mobility.
- ▶ Sertifikasi diberikan terkait bidang profesi TI, tidak terikat pada vendor tertentu (vendor-neutral).



Level Sertifikasi

- ▶ **Foundational**

- ▶ untuk siswa atau pekerja baru di dunia IT.

- ▶ **Professional**

- ▶ untuk pekerja IT pada tingkat entry-level maupun pekerja IT yang sudah mapan.

- ▶ **Specialty**

- ▶ untuk area kepakaran tertentu

- ▶ **Mastery**

- ▶ untuk pekerja IT yang sudah berpengalaman



CompTIA - Basic Level

▶ CompTIA IT Fundamentals

- ▶ Mencakup beberapa topik di dunia IT dan dasar yang kuat mengenai konsep dan praktik teknologi terkini dalam organisasi.
- ▶ Pengetahuan dasar tentang komponen komputer, instalasi perangkat lunak, jaringan komputer dan pencegahan risiko keamanan.
- ▶ Dapat digunakan sebagai batu loncatan untuk mendapatkan sertifikasi di level berikutnya.
- ▶ Job roles: untuk siswa yang ingin persiapan karir di dunia IT atau pekerja yang akan beralih profesi di bidang IT



CompTIA - Professional

▶ **CompTIA A+**

- ▶ Pengetahuan dasar tentang teknologi software dan hardware dan keterampilan untuk mendukung infrastruktur IT yang kompleks.
- ▶ Job roles: Technical Support Specialist, IT Support Technician

▶ **CompTIA Cloud+**

- ▶ Keahlian dalam mengimplementasikan teknologi cloud secara aman, termasuk pemeliharaan dan utilize terhadap teknologi tersebut.
- ▶ Job roles: Cloud Services, Cloud Engineer, Business Analyst

▶ **CompTIA Linux+**

- ▶ Pengetahuan dan keahlian tentang Linux untuk level junior.
- ▶ Job roles: Junior Linux Administrator, Junior Network Administrator, System Administrator



CompTIA - Professional

▶ **CompTIA Mobility+**

- ▶ Pengetahuan tentang teknologi mobile terkini dan kemampuan untuk bekerja dengan teknologi tersebut.
- ▶ Job roles: mobility engineer, network administrator, mobile device management administrator

▶ **CompTIA Network+**

- ▶ Pengetahuan dan ketarampilan untuk mendesain, konfigurasi, mengelola dan troubleshooting jaringan kabel maupun wireless.
- ▶ Job roles: Network support specialist, Network administrator, Network analyst

▶ **CompTIA Project+**

- ▶ Kemampuan untuk menginisiasi dan mengelola proyek atau inisiatif bisnis dengan tepat waktu menggunakan budget yang tersedia.
- ▶ Job roles: Project manager, Business analyst



CompTIA - Professional

▶ CompTIA Security+

- ▶ Pengetahuan dan best practices tentang cara mengamankan (securing) pada jaringan kabel maupun nirkabel, termasuk mengelola risikonya.
- ▶ Job roles: Security Engineer, Security specialist, Security or system administrator

▶ CompTIA Server+

- ▶ Pembangunan, pengamanan dan troubleshooting teknologi hardware dan software server.
- ▶ Job roles: Systems Engineer, Server administrator



CompTIA – Specialty Level

- ▶ **CompTIA CDIA+ (Certified Document Imaging Architect+)**
 - ▶ Pengetahuan tentang document imaging dan document management.
 - ▶ Job roles: Solution sales specialist, Electronic Records Manager.
- ▶ **CompTIA CTT+ (Certified Technical Trainer+)**
 - ▶ Pengetahuan serta penggunaan tools dan teknik untuk training pada lingkungan pembelajaran masa kini.
- ▶ **CompTIA Cloud Essentials**
 - ▶ Pengetahuan mengenai cloud computing dari sudut pandang bisnis dan operasi.
 - ▶ Isu dan solusi praktis cloud computing dalam dunia bisnis.
 - ▶ Non-technical employees: management, customer service, operation.



CompTIA – Specialty Level

- ▶ **CompTIA Healthcare IT Technician**

- ▶ Pengelolaan sistem IT dalam dunia medis dan klinik.
- ▶ Job roles: berbagai posisi IT di dunia kesehatan.

- ▶ **CompTIA Social Media Security Professional**

- ▶ Pengetahuan dan keahlian dalam penilaian, pengelolaan dan pengurangan risiko keamanan dari social media.



CompTIA – Master Level

- ▶ **CompTIA CASP (CompTIA Advanced Security Practitioner)**
 - ▶ Security tingkat lanjut pada lingkungan yang kompleks.
 - ▶ Job roles: Security architect, Cybersecurity Risk Manager, Cybersecurity Risk Analyst.





Lembaga Sertifikasi Nasional

LSP TIK

LSP Telematika

LSP TIK

- ▶ Lembaga Sertifikasi Profesi Teknologi Informasi dan Telekomunikasi Indonesia.
- ▶ Berdiri tanggal 1 Mei 2007.
- ▶ Memiliki lisensi dari BNSP (Badan Nasional Sertifikasi Profesi) untuk melakukan proses pembuktian bahwa seorang tenaga yang profesional benar-benar kompeten dalam bidang kompetensinya.
- ▶ Pembuktian kompetensi yang dilakukan oleh **LSP TIK** berdasarkan Standar Kompetensi Kerja Nasional Indonesia (SKKNI), aspek: pengetahuan, ketrampilan, keahlian, dan sikap.



LSP TIK

- ▶ **Bidang Kompetensi**
 - ▶ Operator Komputer
 - ▶ Networking
 - ▶ Programming
 - ▶ Multimedia
 - ▶ Teknisi Komputer
 - ▶ Desain Grafis



LSP Telematika

- ▶ Lembaga Sertifikasi Profesi Telekomunikasi, Multimedia dan Informatika.
- ▶ Dalam proses sertifikasi LSP Telematika merujuk kepada standarisasi yang berdasarkan kepada Standar Internasional Khusus dan Standar Kompetensi Kerja Nasional Indonesia (SKKNI).
- ▶ Masa berlaku sertifikat: 2 tahun.



► Proses Sertifikasi



LSP Telematika

Jenis Sertifikasi

- ▶ **Operator**
 - ▶ Junior Office Operator, Help Desk, Senior Office Operator
- ▶ **Programming**
 - ▶ Junior Programmer, Programmer, Junior Web Programmer, Web Programmer, Database Programmer, Mobile Programmer, dsb.
- ▶ **Technical**
 - ▶ Junior Technical Support, Technical Support
- ▶ **Network**
 - ▶ Network Technician, Network Administrator, Network Architecture
- ▶ **Administrator**
 - ▶ Junior System Administrator, System Administrator, System Engineer
- ▶ **Multimedia**
 - ▶ Junior Digital Artist, Digital Artist



Persiapan untuk Sertifikasi

- ▶ Perbanyak latihan
- ▶ Catat waktu saat latihan
- ▶ Belajar secara berkelompok dapat membantu
- ▶ Terapkan beberapa metode persiapan (belajar dari buku, partisipasi dalam forum online, mengikuti formal training)
- ▶ Pastikan kondisi diri siap saat mengikuti tes



Referensi

- ▶ Sumastre, M.G., 2013, IT Certifications 101: The Why, What and How of IT Certifications, <https://www.pluralsight.com/blog/it-ops/it-certification-101> [diakses pada 26 Mei 2016 pukul 20:00].
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