

## ACRONYM LIST

<b>ACRONYM</b>	<b>DESCRIPTION</b>
A&A	Assist and Assess
AAC	Assurance Access Control
AAR	After Action Report
AASHTO	American Association of State Highway and Transportation Officials
AC	Access Complexity
AC	Access Control
ACC	American Chemical Council
ACG	A Commercial Grade
ACL	Access Control List
AD	Architectural Description
ADA	American Disabilities Act
ADAAG	ADA Accessibility Guidelines for Buildings and Facilities
AES	Advanced Encryption Standard
AES-CCM	Advanced Encryption Standard-Counter with CBC-MAC
AGA	American Gas Association
AH	Authentication Header
AI	Artificial Intelligence
AIChE	American Institute of Chemical Engineers
AIS	Automated Information System
AIS	Automated Identification System
AITAT	Adversary Infrastructure Targeting Analysis Team
AM	Automated Manufacturing
AMI	Advanced Metering Infrastructure
ANSI	American National Standards Institute
AOR	Area of Responsibility
AOR	Assurance Organization Rigor
AOS	Application Object Servers
AP	Access Point
API	American Petroleum Institute
API	Application Programming Interface
APS	Advanced Power Server

<b>ACRONYM</b>	<b>DESCRIPTION</b>
APT	Advanced Persistent Threat
APTA	American Public Transportation Association
AR	System Availability Requirement
ARM	Advanced RISC Machine
ARP	Address Resolution Protocol
ASCII	American Standard Code for Information Interchange
ASLR	Address Space Layout Randomization
ASP	Alternative Security Program
ASR	Auto Sectionalization and Restoration
AT	Assessment Target;
AT	Awareness and Training
ATA	American Trucking Associations
AU	Authentication
AUD	Advanced User Debu
AV	Access Vector
AV	Anti-Virus
AWWA	American Water Works Association
BDM	Background Debug Mode
BGA	Ball Grid Array
BMS	Building Management System
BowTIE	Bow Networks Telemetry Integrated
BPL	Broadband over Power Line
BZP	Buffer Zone Plans
BSDL	Boundary Scan Description Language
CA	Certificate of Authority
C/ACAMS	Constellation/Automated Critical Asset Management System
CAD	Computer-Aided Design
CAG	Consensus Audit Guidelines
CAN	Controller-Area Network
CAS	Chemical Abstracts Services
CASM	Communications Assets Survey and Mapping

<b>ACRONYM</b>	<b>DESCRIPTION</b>
CBC-MAC	Cipher Block Chaining-Message Authentication Code
CBP	Customs and Border Protection
CC	Coordinating Council
CC	Critical Control
CCIRC	Canadian Cyber Incident Response Center
CCP	Citizen Corps Program
CD	Compact Disc
CDA	Critical Digital Asset
CDMA	Code-Development Multiple Access
CDP	Collateral Damage Potential
CDP	Cisco Discovery Protocol
CDS	Common Data System
CEA	Consequence and Effects Analysis
CERT-CC	CERT Coordination Center
CFI	Common Flash Interface
CFIUS	Committee on Foreign Investment in the United States
CI	Critical Infrastructure
CIAG	Critical Infrastructure Assurance Group
CICISD	Critical Infrastructure Criminal Investigation Division
CIIN	Critical Infrastructure Information Notice
CIIP	International Critical Information Infrastructure Protection
CIM	Common Information Model
CIO	Chief Information Officer
CIP	Critical Infrastructure Protection (used in relation to NIST 800 82)
CIP	Common Industrial Protocol
CIPAC	Critical Infrastructure Partnering Advisory Council
CIPRsim	Critical Infrastructure Protection and Resilience Simulator
CIRs	Critical Information Requirements
CIS	Center for Internet Security
CIS	Customer Information System
CM	Configuration Management

<b>ACRONYM</b>	<b>DESCRIPTION</b>
CMU	Carnegie Mellon University
CNCI	Comprehensive National Cybersecurity Initiative
CNPI	Centre of the Protection of National Infrastructure
COBRA	Common Object Request Broker Architecture
COI	Chemical of Interest
COI	Conflict of Interest
CONOPS	Concept of Operations
COOP	Continuity of Operations
CoR	Catalog of Control System Security Recommendations for Standards Developers
COTP	Connection Oriented Transport Protocol
COTR	Contracting Officer's Technical Representative
COTS	Commercial Off The Shelf
CPU	Central Processing Unit
CR	System Confidentiality Requirement
CRADA	Cooperative Research and Development Agreement
CRM	Customer Relationship Management
CS&C	Cyber Security and Communications
CS <sup>2</sup> SAT	Control Systems Cyber Security Self-Assessment Tool
CSAC	Control Systems Analysis Center
CSAR	Control Systems Analysis Report
CSAT	Chemical Security Assessment Tool
CSCD	Chemical Security Compliance Division
CSCP	Chemical Security Compliance Project
CSCSWG	Cross-Sector Cyber Security Working Group
CSCTG	Cyber Security Coordination Task Group
CSDMAR	Control Systems Digital Media Analysis Report
CSET	Cyber Security Evaluation Tool
CSM	Cyber Security Management
CSOC	Cyber Security Operations Center
CSRF	Cross-site Request Forgery
CSS	Cascading Style Sheet

<b>ACRONYM</b>	<b>DESCRIPTION</b>
CSSC	Control Systems Security Center
CSVA	Cyber Security Vulnerability Assessment
CSWG	Cyber Security Working Group
CTICG	Cyber Threat Intelligence Coordinating Group
CTS	Clear to Send
CVE	Common Vulnerabilities and Exposures
CVSS	Common Vulnerability Scoring System
DA	Data Automation
DAA	Designated Approving Authority
DACS	Data Acquisition and Control System
DAO	Database Access Object
DAR	Design Architecture Review
DATES	Detection and Analysis of Threats to the Energy Sector
DBGACK	Debug Ack
DBGRQ	Debug Request
DBMS	Database Management System
DC	Domain Controller
DCE	Distributed Computing Environment
DCOM	Distributed Component Object Model
DCS	Distributed Control System
DES	Data Encryption Standard
DH+	Data Highway Plus
DHCP	Dynamic Host Configuration Protocol
DHS	Department of Homeland Security
DIB	Defense Industrial Base
DIP	Dual Inline Package
DLL	Dynamic Link Library (.dll)
DMA	Direct Memory Access
DMS	Distribution Management System
DMZ	Demilitarized Zone
DNP	Data Network Protocol

<b>ACRONYM</b>	<b>DESCRIPTION</b>
DNP	Distributed Network Protocol
DNP3	Distributed Network Protocol Version 3
DNS	Domain Name System (Service)
DNSSEC	DNS Security Extensions
DoD	Department of Defense
DOE	Department of Energy
DOE-OE	Department of Energy, Office of Electricity Delivery and Energy Reliability
DOJ	Department of Justice
DoS	Denial of Service
DOT	Department of Transportation
DPI	Deep Packet Inspection
DR	Data Register
DRAM	Dynamic Random Access Memory
DSC	Data Logging and Supervisory Control
DSL	Digital Subscriber Line
DSP	Digital Signal Processor
DTLS	Datagram Transport Layer Security
DTP	Dynamic Trunking Protocol
DVD	Digital Video Disc
EAP	Extensible Authentication Protocol
ECC	Error-Correcting Code or Error Checking and Correction
ECSA	Embedded Controller Security Assurance
EEI	Essential Elements of Information
EEPROM	Electrically Erasable Programmable Read Only Memory
EIGRP	Enhanced Interior Gateway Routing Protocol
EJTAG	Enhanced JTAG
ELF	Executable and Linkable Format
EMR-ISAC	Emergency Management and Response ISAC
EMS	Energy Management System
EPR	Electronic Pressure Recorder
EPROM	Erasable Programmable Read Only Memory

<b>ACRONYM</b>	<b>DESCRIPTION</b>
ERO	Electric Reliability Organization (FERC mandated, NERC implemented)
ES-ISAC	Electricity Sector ISAC
ESD	Electrostatic Discharge
ESP	Encapsulating Security Payload
EUID	Effective User ID
FAT	File Allocation Table
FAT	Final Acceptance Test
FAT	Functional Acceptance Testing
FBI	Federal Bureau of Investigation
FBIIC	Financial and Banking Information Infrastructure Committee
FCS	Functional Requirement Cryptographic Service
FDA	Food and Drug Administration
FEM	Fuel Efficiency Monitoring System
FEMA	Federal Emergency Management Agency
FEP	Front End Processor
FERC	Federal Energy Regulatory Commission
FFS	Flash File System
FHSS	Frequency Hopping Spread Spectrum
FIB	Focused Ion Beam
Fimmgrd	Fieldbus Interface Module Manager Daemon
FINRA	Financial Industry Regulatory Authority
FIPS	Federal Information Processing Standard
FIRST	Forum of Incident Response and Security Teams
FISMA	Federal Information Security Management Act
FLIRT	Fast Library Identification and Recognition Technology
FO	Focused Operations
FOIA	Freedom of Information Act
FOUO	For Official Use Only
FPGA	Field Programmable Gate Array
FPIC	Federal Partnership for Interoperability Communications
FS-ISAC	Financial Services

<b>ACRONYM</b>	<b>DESCRIPTION</b>
FSSCC	Financial Services Sector Coordinating Council
FTB	Forensics ToolBox
FTL	File Translation Layer
FTP	File Transfer Protocol
GAO	Government Accountability Office
GAP	Global Access Policy
GCC	Government Coordinating Council
GDB	GNU Project Debugger
GFE	Government Furnished Equipment
GFI	Government Furnished Information
GFIRST	Government Forum on Incident Response Security Teams
GIAC	Global Information Assurance Certification
GIOP	General InterORB Protocol
GIS	Geographical Information System
GNNS	Global Navigation Satellite Systems
GNU	GNUs not UNIX
GOT	Global Offset Table
GPS	Global Positioning System
GUI	Graphical User Interface
GUID	Globally Unique Identifier
HAS	Homeland Security Advisor
HAZOP	Hazard and Operability Studies
HF	High Frequency
HHS	Department of Health and Human Services
HIDS	Host-based Intrusion Detection System
HITRAC	Homeland Infrastructure Threat and Risk Analysis Center
HMI	Human-Machine Interface
HPH	Healthcare and Public Health
HP-UX	Hewlett Packard UNIX
HSDN	Homeland Security Data Network
HSGP	Homeland Security Grant Program



<b>ACRONYM</b>	<b>DESCRIPTION</b>
HSIN	Homeland Security Information Network
HSIN-CS	Homeland Security Information Network-Critical Sectors
HSPD	Homeland Security Presidential Directives
HSRB	Hot Standby
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol over Secure Socket Layer
I/O	Input/Output
IA	Identification and Authenticity
IA	Information Assurance
I&A	Intelligence and Analysis
I <sup>2</sup> C	Inter-Integrated Circuit
IACS	Industrial Automation and Control Systems
IASD	Infrastructure Analysis and Strategy Division
IATF	Integrated Analysis Task Force
ICBA	Independent Community Bankers of America
ICCP	Intercontrol Center Communications Protocol
ICD	In-Circuit Debugger
ICE	In-Circuit Emulator
ICMP	Internet Control Message Protocol
ICS	Industrial Control Systems
ICS-ALERT	ICS-CERT Alert (generally associated with ICS vulnerability)
ICS-CEA	Industrial Control Systems Consequence Effects and Analysis
ICS-CERT	Industrial Control Systems Cyber Emergency Response Team
ICSJWG	Industrial Control Systems Joint Working Group
ICST:	Information and Communication Security Technology Center, Taiwan, R.O.C.
ICTAP	Interoperable Communications Technical Assistance Program
ID	Identification
IDCS	Integrated Development and Control System
IDet	Intrusion Detection
IDL	Interface Definition Language

<b>ACRONYM</b>	<b>DESCRIPTION</b>
IDS	Intrusion Detection System
IE	Internet Explorer
IEC	International Electrotechnical Commission
IED	Intelligent Electronic Device
IEEE	Institute of Electrical and Electronics Engineers
IESO	Independent Electric Systems Operator
IGA	Office of Intergovernmental Affairs
IGSS	Interactive Graphical SCADA System
IH	Incident Handler
IIS	Internet Information Services
IJ	Investment Justification
IKE	Internet Key Exchange
IMRT	Incident Management Response Team
INFO	Information
INGAA	Interstate Natural Gas Association of America
IOS	Internetwork Operating System
IP	Internet Protocol
IP	Office of Infrastructure Protection
IPS	Intrusion Prevention System
IPSec	Internet Protocol security
IR	Incident Response
IR-ALERT	ICS-CERT Incident Alert (associated with incident response activities)
ISA	Instrumentation, System, and Automation Society
ISA	International Society of Automation
ISAC	Information Sharing and Analysis Center
ISCA	Information System Control Association
ISCI	ISA Security Compliance Institute
ISD	Intersite Data (Protocol)
ISID	Industrial Security Incident Database
ISO	International Organization for Standardization
ISP	Internet Service Provider

<b>ACRONYM</b>	<b>DESCRIPTION</b>
IT	Information Technology
IT-ISAC	Information Technology ISAC
IWN	Integrated Wireless Network
JIACTF	Joint Interagency Cyber Task Force
JSP	Java Server Pages
JTAG	Joint Test Action Group
JWG	Joint Working Group
Key	Cryptographic Key
LAN	Local Area Network
LDAP	Lightweight Directory Access Protocol
LIH	Lead Incident Handler
LLIS	Lessons Learned Information Sharing
LM	LAN Manager
LNTA	LeafNode Test Agent
LSB	Least Significant Bit
LVH	Lead Vulnerability Handler
MAC	Media Access Control
MAR	Malware Analysis Report
MAS	Multiple Address Radio
MBS	Multibyte String
Mbserver	Modbus server
MD5	Message-Digest Algorithm 5
MDA	Maritime Domain Awareness
MDMS	Meter Data Management System
MISO	Master In Slave Out
MitM	Man-in-the-Middle
MLF	Message Logging Facility
MMU	Memory Management Unit
MOA	Memorandum of Agreement
MOE	Mission Operations Environment
MOSI	Master Out Slave In

<b>ACRONYM</b>	<b>DESCRIPTION</b>
MOU	Memorandum of Understanding
MP	Media Protection
MS	Microsoft
MS-SQL	Microsoft Structured Query Language
NAP	Network Access Point
NAVV	Network Architecture Verification and Validation
NCC	National Coordinating Center (for Telecommunications)
NCCIC	National Cybersecurity and Communications Integration Center
NCD	National Cybersecurity Division (This is more common now)
NCIRP	National Cyber Incident Response Plan
NCRAL	National Cyber Response Alert Level
NCS	National Communications System
NCSG	National Cyber Study Group
NDA	Nondisclosure Agreement
NDIA	National Defense Industrial Association
NERC	North American Electric Reliability Corporation
NESCO	National Energy Sector Cybersecurity Organization (name of a company)
NIAC	US National Infrastructure Advisory Council
NIC	Network Interface Card
NICC	National Infrastructure Coordination Center
NIDS	Network-based Intrusion Detection System
NIPC	National Infrastructure Protection Center
NIPP	National Infrastructure Protection Plan
NISAC	National Infrastructure Simulation and Analysis Center
NISCC	National Infrastructure Security Coordination Centre
NIST	National Institute of Standards and Technology
NMR2	Network Manager Release 2 SCADA EMS
NMR3	Network Manager Release 3 SCADA EMS
NMX	Network Message Exchange
NOA	Notice of Arrival
NOP	No Operation Performed

<b>ACRONYM</b>	<b>DESCRIPTION</b>
NPD	NULL Pointer Dereferences
NPPD	National Protection and Programs Directorate
NPPO	National Protection and Planning Office
NRC	Nuclear Regulatory Commission
NrCan	Natural Resources Canada
nRESET	System Reset Signal (low asserted)
NSA	National Security Agency
NSC	National Security Council
nSRST	System Reset Signal (low asserted)
NSSA	Nuclear Specific Sector Agency
NSTAC	National Security and Telecommunications Advisory Committee
NSTB	National SCADA Test Bed
NTIA	National Telecommunications and Information Administration
NTLM	New Technology LAN Manager
NTP	Network Time Protocol
nTRST	Test Reset (low asserted)
OATI	Open Access Technology International, Inc.
ODBC	Open Database Connectivity
OCR	Office of Congressional Relations
ODC	Other Directed Costs
OEA	Office of External Affairs
OEC	Office of Emergency Communication
OEM	Original Equipment Manufacturer
OGC	Office of the General Council
OIA	Office of Internal Affairs
OIC	Office for Interoperability and Compatibility
OIP	Office of Infrastructure Protection
OLE	Object Linking and Embedding
ONFI	Open NAND Flash Interface
OPC	Object Linking and Embedding for Process Control
OPC	Open Process Control

<b>ACRONYM</b>	<b>DESCRIPTION</b>
OPLA	Office of Principal Legal Advisor
OPR	Office of Professional Responsibility
OS	Operating System
OSI	Open System Interconnection
OSINT	Open Source Intelligence
OSLC	Office of State/Local Coordination
OUO	Official Use Only
OWA	Outlook Web Access
PC	Personal Computer
PCB	Printed Circuit Board
PCII	Protected Critical Infrastructure Information
PCIS	Partnership for Critical Infrastructure Security
PCN	Process Control Network
PCP	Programmable Channel Processor
PCS	Process Control System
PCSRT	Process Control Security Response Team
PCSS	Process Control and SCADA Simulator
PDA	Personal Digital Assistant
PDF	Portable Document Format
PE	Physical and Environmental Protection
PE	Portable Executable
PED	Personal Electronic Device
PI	Principal Investigator
PIC	Peripheral Interface Controller, family of microcontrollers manufactured by Microchip Technology
PIDX	Petroleum Industry Data Exchange
PIV	Personal Identity Verification
PKI	Public Key Infrastructure
PL	Planning
PLC	Programmable Logic Controller
PM	Program Management
PMO	Project Management Office

<b>ACRONYM</b>	<b>DESCRIPTION</b>
PMU	Phasor Management Unit
PMU	Power Management Unit
PNT	Positioning, Navigation, and Timing
POC	Point of Contact
PoC	Proof of Concept
POD	Partnership and Outreach Division
PS	Personnel Security
PSA	Protective Security Advisor
PSCD	Protective Security Coordination Division
PSCE	Power Systems Conference and Exposition
PSEPC	Public Safety and Emergency Preparedness Canada
PSIC	Public Safety Interoperable Communications
PSK	Preshared Key
PSTN	Public Switch Telephone Network
PT-ISAC	Public Transportation ISAC
PWGSC	Public Works and Government Services Canada
QFP	Quad Flat Package
QW	Quick Win
R&D	Research and Development
RA	Risk Assessment
RAM	Random Access Memory
RAMCAP	Risk Analysis and Management for Critical Asset Protection
RAS	Real-time Applications Server
RAS	Remote Access Services
RAT	Router Audit Tool
RBPS	Risk Based Performance Standard
RC	Report Confidence
RCD	Remote Connect/Disconnect
RDAS	Real-time Data Acquisition Server
RDD	Radiological Dispersal Device
RDP	Remote Desktop Protocol

<b>ACRONYM</b>	<b>DESCRIPTION</b>
RED	Radiological Exposure Device
REM	Removable Electronic Media
RF	Radio Frequency
RFC	Request for comments
RFID	Radio Frequency Identification
RG	Regulatory Guide
RISC	Reduced Instruction Set Computer
RL	Remediation Level
RMS	Remote monitoring system
RoE	Rules of Engagement
RP	Recommended Practice
RPC	Remote Procedure Call
RS-232	Recommended Standard-232
rsh	Remote Shell
RSS	Rich Site Summary
RSTP	Rapid Spanning Tree Protocol
RTCK	Return Test Clock
RTIR	Report Tracker for Incident Reporting
RTOS	Real Time Operating System
RTS	Request to Send
RTU	Remote Terminal Unit
RUID	Real User ID
S4	SCADA Security Scientific Symposium
SA	System Administrator
SA	System and Services Acquisition
SAL	Security Access Level
SAM-BA	SAM Boot Assistant
SANS	SANS Institute (subcontractor) (System Administration, Networking, and Security)
SAT	Standards Awareness Team
SC	Systems and Communications Protection
SCADA	Supervisory Control and Data Acquisition



<b>ACRONYM</b>	<b>DESCRIPTION</b>
SCC	Sector Coordinating Council
SCG	Security Classification Guide
SCI	Special Compartmented Information
SCI	Supply Chain Integrity
SCIF	Special Compartmented Information Facility
SCIPs	Statewide Communications Interoperability Plans
SC-ISAC	Supply Chain ISAC
SD	Secure Digital (Memory Card)
SDLC	Systems Development Life Cycle
SDO	Standards Development Organization
SEH	Structured Exception Handler
SEM	Scanning Electron Microscope
SFTP	SSH File Transfer Protocol
SHARES	Shared Resources
SHIRA	Strategic Homeland Infrastructure Risk Assessment
SI	Systems and Information Integrity
SID	Security Identifier
SIF	Safety Instrumented Functions
SIFMA	Securities Industry and Financial Markets Association
SIS	Safety Information System
SISCO	Systems Integration Specialists Company, Inc.
SLTTGCC	State, Local, Tribal, and Territorial Government Coordinating Council
SME	Subject Matter Expert
SMS	Simple Messaging System
SNMP	Simple Network Management Protocol
SOAP	Simple Object Access Protocol
SOC	System-On-Chip
SOC	Security Operations Center
SOCMA	Synthetic Organic Chemical Manufacturers Association
SOP	Standard Operating Procedure
SoS	System of Systems

<b>ACRONYM</b>	<b>DESCRIPTION</b>
SP	Special Publication
SPI	Serial Peripheral Interface
SQL	Structured Query Language
SRAM	Static Random Access Memory
SSA	Sector-Specific Agency
SSAR	Standards Support Activities Report
SSH or ssh	Secure Shell
SSL	Secure Sockets Layer
SSLIOP	Secure Socket Layer InterORB Protocol
SSP	Site Security Plan
SSR	System Security Requirement
ST-ISAC	Surface Transportation ISAC
STP	Spanning Tree Protocol
Strace	System Trace
TACACS+	Terminal Access Controller Access-Control System
TAP	Test Access Port
TASE	Telecontrol Application Service Element
TCB	Trusted Computing Base
TCK	Test Clock
TCL	Tool Command Language
TCP	Transmission Control Protocol
TCPIP	Transmission Control Protocol—Internet Protocol
TCS	Thin Client Server
TD	Target Distribution
TD	Technical Direction
TDI	Test Data Input
TDO	Test Data Out
TIE	Telemetry Integrated Environment
TLP	Traffic Light Protocol
TLS	transport layer security
TMS	Test Mode Select

<b>ACRONYM</b>	<b>DESCRIPTION</b>
TOE	Target of Evaluation
TOU	Time of Use
TPKT	Transport Packet
TRST	Test Reset
TSOP	Thin Small-Outline Package
TSP	Training Support Package
TSSCWG	Transportation Systems Sector Cybersecurity Working Group
TSWG	Technical Support Working Group
TTPs	Tactics, techniques, and procedures
TWWG	Trustworthy Wireless Working Group
U	Unclassified
UDP	User Datagram Protocol
UHF	Ultra High Frequency
UI	User interface
uIP	micro Internet Protocol
URL	Uniform Resource Locator
USART	Universal Asynchronous Receiver/Transmitter
USB	Universal Serial Bus
US-CERT	United States Computer Emergency Readiness Team
UTF	Uniform Transformation Format
VDU	Virtual Display Unit
VFD	Voice Fax Data
VH	Vulnerability Handler
VHDL	VHSIC Hardware Description Language
VHF	Very High Frequency
VHSIC	Very High Speed Integrated Circuit
VLAN	Virtual Local Area Network
VM	Virtual Machine
VoIP	Voice-Over Internet Protocol
VPN	Virtual Private Network
VTP	Virtual Trunking Protocol

<b>ACRONYM</b>	<b>DESCRIPTION</b>
VTref	Target Reference Voltage
VTS	Vessel Traffic System
VTY	Virtual Teletype Terminal
W&W	Watch and Warning
WAN	Wide Area Network
WASP	Weekly Analytic Synopsis Product
WATERISAC	Water Information Sharing and Analysis Center
WECC	Western Electricity Coordinating Council
WEF	Windows Event Forwarder
WEP	Wired Equivalent Privacy
WNSIA	Wireless Network for Secure Industrial Applications
WO	Watch Officer
WPA	Wi-Fi Protected Access
WPA2	Wi-Fi Protected Access (2 <sup>nd</sup> Gen)
WSUS	Windows Server Update Services
WWW	World Wide Web
XML	eXtensible Markup Language
XOR	Exclusive Or
XSRF	Cross Site Request Forgery
XSS	Cross-Site Scripting