

# Connect. Configure. Innovate. With Cisco's Service Exchange Platform.

With Cisco<sup>®</sup> Service Exchange Platform (SXP), your organization can connect, engage, and collaborate with critical external audiences including customers, business partners, and suppliers by delivering a secure, integrated, and personalized portal environment.

The next big phase of the Internet - the Internet of Everything (IoE) - brings together people, process, data, and things. Here, connectivity is even more vital than ever before. As connections grow, the IoE will create unprecedented opportunities for countries, businesses, and people. To take full advantage of those opportunities, you need a new and innovative IT model. That model needs to remove complexity, make your business more agile, and keep it secure.

The lines between your organization and those you do business with are blurring. Business processes and workflows cross networks. Collaboration, automation of business processes, and mobile enablement are critical for success particularly in industry-specific environments. Your partners, suppliers, and business customers want to deal in real time.

To gain a competitive edge in an industry, you need cost-effective and agile business processes. You need to be able to:

- Develop and deploy new applications rapidly and at minimal cost to innovate, compete, and grow
- · Work smarter and more efficiently
- · Create exceptional experiences for your customers and partners
- Provide a gateway from which to open and create new markets
- · Drive business value by innovating faster and better
- Increase the agility of your business processes and automate them
- · Combine your organization's data management and software internally and with other organizations
- · Mitigate data proliferation

All while minimizing risk and ensuring security at a lower cost of ownership by employing cloud-computing technology to reduce IT infrastructure.

The Cisco Service Exchange Platform (SXP) is a cloud-based environment. With Service Exchange Platform, you can connect securely with all your business users, and do things you never thought you could, faster than you dreamed possible:

• Deploy cloud and enterprise applications faster, centralize management, and authorize access with a single sign-on.

- Reduce the cost, complexity, and risk of sharing information and applications through an industry-proven, on-demand portal environment that delivers a secure, integrated, and personalized experience.
- Provide information to end users on any device across platforms, regardless of data origin, document type, format, communication protocol, network connection, or system integration needs.
- Develop, deploy, and access applications through a secure application marketplace.
- Collaborate in real time from anywhere on any device through video, audio, and instant messaging.
- Offer business process and automation as a service in both enterprise business-to-business and marketplace exchange settings.

# Connect. Configure. Innovate.

With Cisco SXP, your organization can connect with users, configure security, control access, and innovate by integrating mobile and web-based applications.

#### Connect

Deploy the secure, flexible platform to as many users as needed to support growth as business evolves. Users can access resources with one-step authentication and collaborate across your enterprise from anywhere on any device. They can access resources using one password, in a secure, dynamic social environment that expresses your brand. Connect people to people, machine to machine, and provide information to end users across platforms regardless of data origin or device.

#### Configure

With central control and centralized, automated identity management, it's easy to administer security and control access to internal and cloud applications. You can integrate and manage IDs and passwords with less cost and effort. Easily administer and provision users with automated and configurable workflow management, using simple self-service tools.

#### Innovate

With an API-driven marketplace, you can efficiently build, secure, authenticate, and test web-based and mobile applications. Because the platform is cloud based, you can start building and integrating applications right away. And, you can get to market faster at less cost by automating business processes.

#### Platform Components and Features

Cisco SXP is a cloud-based solution. SXP provides a single entry point for business partners and customers to connect with enterprises while creating and enabling mission-critical external business processes. Cisco SXP breaks down the information and data barriers that exist between business partners. It ensures trusted information gets to the right people and place at the right time.

Cisco SXP consists of the following five services:

- · Cloud identity services
- · Cloud integration brokerage services
- Portal services
- API services
- · Orchestration for business services

## **Cloud Identity Services**

Cloud identity services drastically reduces the burden of integrating complex systems, managing multiple IDs and passwords across a wide network of constituents, performing time-consuming administration and reporting, and ensuring compliance. Cloud identity services helps enable organizations to simply and securely manage digital identities across virtually any combination of internal and external systems, and end-user groups.

Delivered as an on-demand set of services, Cloud identity services centralizes and automates processes surrounding the exposure, acceptance, and monitoring of digital identities across security domains. With these services organizations can use industry-leading services while remaining insulated from the cost and complexity of on-premises approaches. Cloud identity services includes a set of comprehensive services:

- Authentication and authorization services: Authentication and authorization services are provided to
  confirm users' or computers' identities before they access your systems, as well as control user access to
  data. In addition, these services provide primary authentication and authorization to your users regardless
  of whether they are employees, contractors, suppliers, partners, clients, or customers. This is accomplished
  by directly binding users to their credentials and then providing them with a domain-specific security token
  to be used for session security.
- Self-service single sign-on (SSO): With self-service SSO organizations can build federated SSOs to applications that require managed user access. Users do not need to remember and manage countless credentials.
- Delegated administration: Delegated administration gives organizations the ability to distribute
  administrative tasks to subsets of users so that organizations can then manage access to their own users.
  With the use of delegated administration, your enterprise retains oversight of specific applications available
  to each partner, final approval on the applications users can access, removal of application access by user
  or partner, and monitoring that user audits are performed as required.
- Identity Provider: With the Identity Provider, your administrators can manage group and user information, and the applications that are available to them. With the Identity Provider, you can create and manage identities' lifecycles. With this service you are able to invite, register, and approve identities, as well as suspend and remove identities. With the delegated administration feature in Identity Provider, the administrative workload can be distributed in an organization and among partners and affiliates.
- Identity Broker The Identity Broker centralizes and automates the process of exposing, accepting, and
  monitoring digital identities across multiple security domains. The Identity Broker supports protocol
  translation, with which you can select the technology and standards best suited to your back-end
  environment without fear of dependencies or interoperability issues with other partners. A single connection
  to Cisco SXP drastically reduces the burden of complex systems integration, management of multiple IDs
  and passwords, time-consuming reporting, security rules enforcement, and help desk administration.
- ID Bridge: Also known as "Inside Out", the ID Bridge is an on-premises application that integrates your current identity management processes with Cloud Identity Services. It does this through two primary functions: (a) Observes changes to individuals' accounts in your enterprise directory service and appropriately creates, updates, or suspends their account in Cloud Identity Services. (b) Authenticates users for Cloud Identity Services using their local enterprise credentials; however, the credentials never leave your organization and are never made available to Cloud Identity Services.

- **ID Sync**: Also known as "Outside In", the ID Sync provides synchronization capabilities that can keep information required for identity management synchronized between Cloud Identity Services and partner directories or application repositories. ID Sync capabilities can be unidirectional or bidirectional, can be propagated to and from any sponsored organization, and uses a service-orientated message bus to provide guaranteed delivery, queuing, and sequencing.
- Auditing: Cloud Identity Services provides centralized auditing and logging of each user's activity to and from applications and can also track and audit activity on a per-application basis.

## **Cloud Integration Brokerage Services**

Cisco SXP enables organizations to retrieve data from disparate data sources and aggregate it. Its messaging hub is a multitenant, cloud-based integration engine connecting endpoints and performing electronic data interchange (EDI) transactions. The messaging hub is responsible for the movement and tracking of all data from each system by providing any-to-any transaction mapping, editing, transformation, routing, splitting, delivery, auditing, logging, and support for industry standard and proprietary transactional formats. The messaging hub uses open-standards and technologies to provide enterprise-to-enterprise (E2E) electronic communications, interoperability with customer business-to-business (B2B) solutions, and internal application integration. In addition, the architecture is reliable, scalable, and fully redundant, while offering a federated global connectivity model and a virtualized environment that helps enable dynamic capacity allocation and tuning. The messaging hub achieves operational excellence through the use of best-practices operation and data management procedures, as well as being monitored on a 24-hour basis using state of the art tools.

The Cisco SXP messaging hub supports:

- · Synchronous and asynchronous messaging
- · Real-time and batch processing
- · Data archive and retrieval
- · Endpoint monitoring
- · Web EDI interface and various industry specific EDI T-Sets, including ANSI X12
- Any-to-any document and code set translation
- · Content-based routing
- Real-time any-to-any data translation
- Real time Extensible Markup Language (XML) messaging to and from web services
- · High message volumes and response times
- Multiple protocols including FTP, HTTP, MQ, web services, ebXML, and AS2
- · Control of user access and user rights
- · Message data encryption protocols
- Processing and mapping of encrypted data without the data ever being stored or viewable as unencrypted

#### Cisco SXP Orchestration Service

Cisco SXP orchestration is an advanced capability that helps enable consumption of services from multiple service providers in a marketplace setting. It offers the ability to onboard and manages value-added services or applications focusing on:

- · Service creation
- · Service onboarding
- · Service externalization
- · Service provisioning
- · Marketplace exchange
- Service assurance
- · Service metering and billing

#### Cisco SXP orchestration provides:

- An instance of a marketplace and with the following capabilities:
  - Self-contained stores, where the catalogue, fulfillment, metering and other Operational Support
    Services and Business Support Systems services are provided by service providers. In this case the
    marketplace offers a single pane of glass to view the services, a consolidated shopping cart experience,
    and hosted and scalable store front capabilities.
  - Automated stores, where by the catalogue, fulfillment capabilities, metering, and other Operational Support Services and Business Support System services are provided by APIs to various service providers
  - Integrated stores help enable creation of composite services, which uses services from various service
    providers by helping to enable a single-pane-of-glass access mechanism and consolidated mechanism
    for fulfillment, metering, provisioning and other Operational Support Services and Business Support
    System services
- The Cisco marketplace can be used in a "headless" fashion, helping to enable various enterprises to use their existing store front implementations.
- Scalable peer-to-peer communication capabilities result in an enhanced security and scalable execution mechanism.

### The Virtual Services Network (VSN)

VSN is a technology platform which provides substantial business value to organizations by delivering services over a virtualized, secured network of dedicated service delivery gateways. VSN enables metering of services to enable a cloud utility consumption model where the service can be provisioned and paid for by the consumer of the service according to the resources used. VSN allows existing enterprise services and assets to be published in a measurable and manageable way using a centralized service-catalog, so that a group of trusted associates can identify and consume them on demand.

#### **Portal Services**

With the SXP portal services, your organization can quickly build and deploy websites and applications to deliver the right information, in the right way, at the right time, and to the right people. Portal services help enable organizations to drive meaningful interaction and collaboration between people and information assets, knowledge assets, and human assets for both internal and external audiences. With portal services your organization can also extend your business and your applications to the platform. In addition, portal services includes an integrated set of technologies to provide interaction between users and a set of applications, processes, content, services, or other users. It includes a set of mash-up tools, content management, search, rich Internet application (RIA) tools, analytics, collaboration, social, and mobile tools.

## Cisco SXP portal services offer:

- Multiple options to rapidly develop applications on the platform or integrate existing applications using the module communication framework
- Integrated, industry-leading identity and access management capabilities to ensure that sensitive information can be accessed only by authorized users
- A dynamic user-experience platform, secured by industry-leading identity and management capabilities, providing the interoperability and governance framework that empowers end users to share knowledge and collaborate with each other across and outside the enterprise
- The ability for organizations to remain completely secure and flexible, even as workforce, IT environments, partner relationships, and business strategies evolve
- Integrated identity and access management (IAM) so that portal administrators can create roles, manage access rights for individuals and groups, and inherit existing directory settings
- Extensive support for multiple device types so that application owners can develop on a single code base and easily define presentation rules that address devices with different capabilities
- A high degree of configurability that can be used to add new features and functions without any impact to existing IT projects

## Portal services are grouped into four key feature sets:

- Mobility and presentation
  - · APIs for native mobile application development
  - Device detection
  - Native mobile launch pad application for Apple iOS and Android
  - · Customizable look and feel
  - · Parallel page design
- Applications and integrations
  - Application development platform
  - Audit and analytics
  - APIs and API gateway
  - Storefront and marketplace
  - · Application certification

- · Collaboration and content management
  - Integrated content management system
  - Document management
  - Site and page templates
  - Knowledge and innovation capture
  - · Wikis, blogs, calendars
- Personalization and communication
  - Integrated identity management
  - Dynamic personalized content
  - User-driven personalization
  - · Portal and SMS alerts and notifications
  - Notification API and messaging service

#### **API Services**

With Cisco SXP API services, your organization can deliver relevant applications across multiple platforms for your partners, suppliers, and customers. API services include pre-integrated applications, application development and certification, application marketplace and storefront, and development and support community. API services has a developer portal that provides a console for developers to execute test API transactions and obtain help documentation, as well as use social tools such as forums and blogs. As part of the service, your organization receives a full analytics view of how all your transactions are performing with overall usage rates.

More web services are offered through an API gateway. This network appliance provides a high-performance, low-latency, and scalable platform for delivering a variety of services and applications, such as web services, software-as-a-service (SaaS) applications, web 2.0 applications, and service-oriented architecture (SOA) applications. It uses service virtualization to consolidate common run-time service infrastructure functions into a single user-configurable device.

The API gateway features the following:

- Security and compliance: enforcing security models and helping to ensure regulatory and contractual compliance with authentication, authorization, encryption, signatures, credential mediation, auditing, logging, client- and target-specific service-level agreement (SLA) monitoring, and schema validation
- **Traffic management**: meeting business priorities for service usage with client- and target-specific rate limiting, target concurrency limiting, quota management, traffic shaping, and traffic prioritization
- **Performance acceleration**: reducing the load on servers in the deployment environment with response caching, credential caching, profile caching, SSL termination, and data compression
- Fault management: mitigating the effects of outages, exceptions, and maintenance with logging, debugging, fault isolation, fault generation, and exception routing
- **Personalization**: easy enforcement of different policies for different categories of clients and targets with profile lookup and policy selection target selection
- **Mediation**: between the client's view of a service and the actual implementation of the service offered by the target with transport mediation, payload mediation, content-based routing, and version mediation

#### Platform as a Service

Cisco SXP is delivered through a platform-as-a-service (PaaS) model, which helps to enable a sophisticated ecosystem of collaboration tools, content management capabilities, search, workflow, mission-critical business process integration, and secure access across multiple select targeted audiences. The highly scalable platform is capable of extending the user experience beyond the browser to mobile devices.

Because Cisco SXP is provided as a fully hosted PaaS solution, Cisco manages and maintains the hardware, software, and network infrastructure in its data centers, including data backup and recovery, disaster recovery, and high availability. The benefits of using the PaaS approach is that enterprises do not have to manage the software installation, configuration, migration, integration, operational support, and other difficulties that typically accompany large software deployment projects. The PaaS approach to service delivery also eliminates the need for enterprises to host, maintain, and support solutions.

The PaaS model includes everything necessary to implement a fully functional, fully supported collaboration solution, so there are no hidden or overlooked costs. Specifically, our PaaS model includes:

- · Hardware for all environments
- · Software installation
- · Web server and database software
- · Application server
- · Networking for all environments
- · Hosting for all environments
- Monitoring and alerting
- Data backup and recovery
- Disaster recovery

#### Benefits

As organizations try to gain a competitive edge in their industries, the demand for cost effective business processes is on the rise. The Cisco Service Exchange Platform delivers a secure, integrated, and personalized portal environment with SSO, with which your enterprise can connect with business partners and customers, configure security and control access, and innovate by integrating mobile and web-based applications. This PaaS model delivers business agility at a lower cost while enabling collaboration and mobile enablement. Cisco customers are adopting this solution based on their need to combine software and data management across organizations, increase agility of and automate business processes, address data proliferation issues, and use software-driven and automated outsourcing.

Cisco SXP is the platform of choice for enterprises that need to securely share and integrate trusted information to critical people and devices across their extended networks of partners and customers. Cisco SXP drives digital business advantages for enterprises by getting trusted information to where it needs to go securely and easily. Devices can communicate safely and enterprises can collaborate and innovate while creating amazing experiences for their business partners and customers.

Because this is a cloud-based solution, ease and speed of deployment are significantly improved over traditional on-premises solutions. Cisco SXP helps ensure that even the most complex implementations - those involving significant integration of mission-critical business processes with the cloud - have significantly faster time to value than traditional on-premises solutions, even with their cloud-based extensions.

Cisco SXP provides the following benefits:

- · Gives users access the information that they want when they want it
- Extends your business reach to your partners, suppliers, and customers
- Provides the tools to securely and reliably helping to enable the flow of mission-critical business processes and information
- · Supports third-party and customer-specific applications and services
- Gives users the ability to collaborate in real time from anywhere on any device
- Increases operational efficiency through centralization
- · Improves business agility and speed
- Automates business processes, especially those that benefit from collaboration between multiple organizations, such as in an industry-specific environment
- · Reduces cost and time to implementation
- Ensures cost-efficiency by using cloud-computing technology, and thus reducing the customer's need for IT infrastructure
- Scales as your enterprise grows by supporting an unlimited number of users, SSO applications, and identity management databases
- · Is a globally managed service
- Meets stringent regulatory compliance requirements
- Delivers reliable and proven result with nearly high availability
- · Secure, auditable, extensible, and flexible
- · Technology and vendor neutral

# **Ordering Information**

Every Cisco SXP order includes the Base Package. The following components are included with the Base Package:

- Administrator Account
- Support for one SSO application on the Cisco SXP portal
- Support for one identity management database to verify identities
- Day 2 product support that includes a single point of contact to give the timely support you need to resolve issues with Cisco SXP
  - For more information about product support, contact <u>b2b\_exchange\_productmgmt@cisco.com</u> or your local account representative.

Table 1 provides the product information and pricing for Cisco SXP. For instructions on how to configure and order Cisco SXP, see the **Cisco Service Exchange Platform Ordering Guide**.

Table 1. Cisco SXP Product Numbers

Product Number	Description
SXP2X-BASE-SMN	Top-Level Package Service Exchange Platform
SXP2X-BASE-USR	Base Package Service Exchange Platform (Enter number of users)
SXP-ADSSO-SMN	Additional SSO applications (Enter number of additional applications to be included in SSO)
SXP-ADSSO-INC	Included in Base Package
SXP-ADIDB-SMN	Additional ID Bridge Recurring Subscription Fee (Enter number of additional ID Bridges)
SXP-ADIDB-INC	Included in Base Package

# Why Cisco

Only Cisco offers a secure, cloud-based managed platform with industry-leading identity and access management and rich real-time collaboration used by organizations worldwide.

We help you make the most of tomorrow's opportunities, today. We prove that amazing things happen when you connect the unconnected. We don't just dream it. We do it.

# Cisco Capital

## Financing to Help You Achieve Your Objectives

Cisco Capital can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. Learn more.

## For More Information

For more detailed information about Cisco SXP, visit: <a href="http://www.cisco.com/c/en/us/products/cloud-systems-management/service-exchange-platform/index.html">http://www.cisco.com/c/en/us/products/cloud-systems-management/service-exchange-platform/index.html</a> or contact your local Cisco account representative.



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