

I hate to ask this,  
but...

What are software assets?



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My mission is to help you (and I) grow and learn, every day! My favicons include:

- ✓ Auditing of financial and IT systems
- ✓ Cloud awareness
- ✓ Cybersecurity
- ✓ CISA



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# CIS Critical Security Controls v8

<b>CONTROL 01</b> Inventory and Control of Enterprise Assets 5 Safeguards   01 2/5   02 4/5   03 5/5	<b>CONTROL 02</b> Inventory and Control of Software Assets 7 Safeguards   01 3/7   02 6/7   03 7/7	<b>CONTROL 03</b> Data Protection 14 Safeguards   01 6/14   02 12/14   03 14/14
<b>CONTROL 04</b> Secure Configuration of Enterprise Assets and Software 12 Safeguards   01 7/12   02 11/12   03 12/12	<b>CONTROL 05</b> Account Management 6 Safeguards   01 4/6   02 6/6   03 6/6	<b>CONTROL 06</b> Access Control Management 8 Safeguards   01 5/8   02 7/8   03 8/8
<b>CONTROL 07</b> Continuous Vulnerability Management 7 Safeguards   01 4/7   02 7/7   03 7/7	<b>CONTROL 08</b> Audit Log Management 12 Safeguards   01 3/12   02 11/12   03 12/12	<b>CONTROL 09</b> Email and Web Browser Protections 7 Safeguards   01 2/7   02 6/7   03 7/7
<b>CONTROL 10</b> Malware Defenses 7 Safeguards   01 3/7   02 7/7   03 7/7	<b>CONTROL 11</b> Data Recovery 5 Safeguards   01 4/5   02 5/5   03 5/5	<b>CONTROL 12</b> Network Infrastructure Management 8 Safeguards   01 1/8   02 7/8   03 8/8
<b>CONTROL 13</b> Network Monitoring and Defense 11 Safeguards   01 0/11   02 6/11   03 11/11	<b>CONTROL 14</b> Security Awareness and Skills Training 9 Safeguards   01 8/9   02 9/9   03 9/9	<b>CONTROL 15</b> Service Provider Management 7 Safeguards   01 1/7   02 4/7   03 7/7
<b>CONTROL 16</b> Applications Software Security 14 Safeguards   01 0/14   02 11/14   03 14/14	<b>CONTROL 17</b> Incident Response Management 9 Safeguards   01 3/9   02 8/9   03 9/9	<b>CONTROL 18</b> Penetration Testing 5 Safeguards   01 0/5   02 3/5   03 5/5



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CONTROL

02

## Inventory and Control of Software Assets

7

Safeguards

IG1

3/7

IG2

6/7

IG3

7/7

A

Software Assets means all information technology systems and software (whether in source code or object code) and all related license, maintenance and service Contracts.



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# A

## Examples:

- ✓ Software programs
- ✓ Licenses
- ✓ Data rights
- ✓ Software documentation
- ✓ Software Dev. agreements
- ✓ Maintenance agreements



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# B

## Let's define some stuff first:

Operating Systems (OS): Software that manages computer hardware and software resources, and provides common services for programs.

### Types of OS:

- ❖ Single- and multi-tasking,
- ❖ Single- and multi-user,
- ❖ Distributed,
- ❖ Templated,
- ❖ Embedded,
- ❖ Real-time,
- ❖ Library



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# B

Let's define some stuff first:

## Applications (Apps):

- ✓ A program, or group of programs, hosted on enterprise assets and designed for end users.
- ✓ Applications are a subset of software.
- ✓ Includes web, database, cloud-based, and mobile applications.



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# B

## Let's define some stuff first:

### Services:

- ✓ **Software functionality or a set of software functionalities (Eg. retrieval of specified information or the execution of operations).**
- ✓ **Provide a mechanism to enable access to one or more capabilities**



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# B

Let's define some stuff first:

## Library:

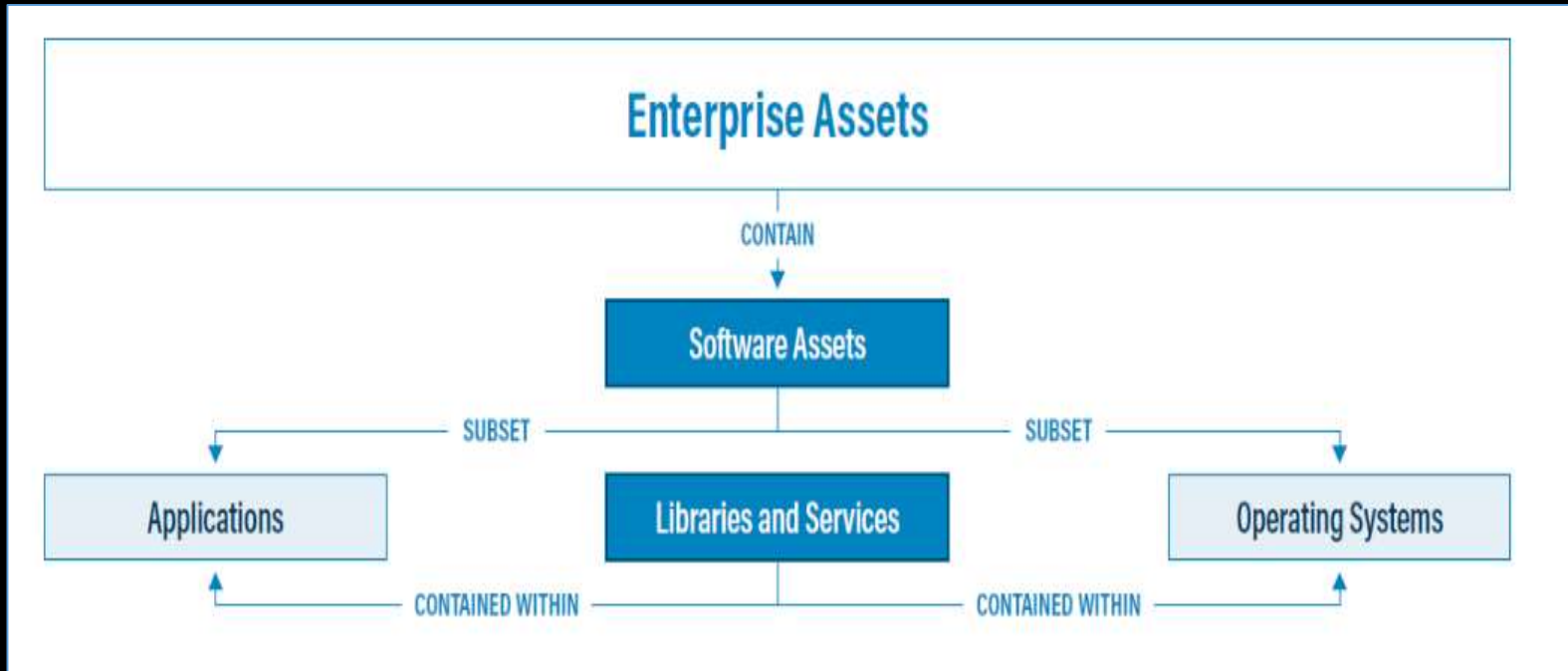
- ✓ Pre-written code, classes, procedures, scripts, configuration data etc. used to develop software programs and apps.
- ✓ Designed to assist both the programmer and the programming language compiler in building and executing software.



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# C

## Software assets as per CIS v8



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# D

## ISO 19770

The ISO/IEC 19770 family of standards are designed to help organizations manage IT assets including software assets (SAM).

- ❖ 19770-1:2017: IT Asset Management Systems Requirements
- ❖ 19770-2:2015: Software identification tag
- ❖ 19770-3:2016: Entitlement Management Schema
- ❖ 19770-4:2017: Resource Utilization Measurement
- ❖ 19770-5:2015: Overview and Vocabulary



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valuable ideas, information & inputs to  
you.

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*Thank you!*



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