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**White Paper:**  
**Capability Ordering**

The TWAIN Working Group  
September 1, 2009

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**TWAIN**  
*Linking Images With Applications*

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## TWAIN Capability Ordering

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The purpose of this document is to point out connections between certain capabilities. The way one capability can affect another is not always obvious and failure to recognize this interdependence is often the reason for unexpected TWAIN Scanning results. Using this as a guideline, an Application Developers can code capability negotiation with confidence, and Data Source developers can refer back to this document to make sure they have not introduced an unusual dependency.

One other note about interpreting this document, the entire list of capabilities is in the context of the Current File System Device. If the Current File System Device was changed using the DAT\_FILESYSTEM triplets, the context of these capabilities is expected to change and re-negotiation must occur. It is much easier to deal with if the File System operations are completed first and Capability negotiation on a large scale is left until just before scanning from a particular device.

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## Independent Capabilities

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These capabilities are considered independent because they do not affect other capabilities and they are not affected by changes in other capabilities.

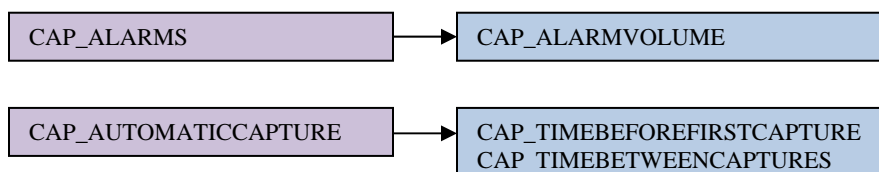
CAP\_ENABLEDSUIONLY  
CAP\_CUSTOMDSDATA  
CAP\_INDICATORS  
CAP\_UICONTROLLABLE  
CAP\_SERIALNUMBER  
ICAP\_LAMPSTATE  
CAP\_BATTERYMINUTES  
CAP\_BATTERYPERCENTAGE  
CAP\_POWERSUPPLY  
ICAP\_BITORDER  
CAP\_DEVICETIMEDATE  
CAP\_DEVICEEVENT  
CAP\_CAMERAPREVIEWUI  
CAP\_POWERSAVETIME  
ICAP\_AUTODISCARDBLANKPAGES  
ACAP\_XFERMECH

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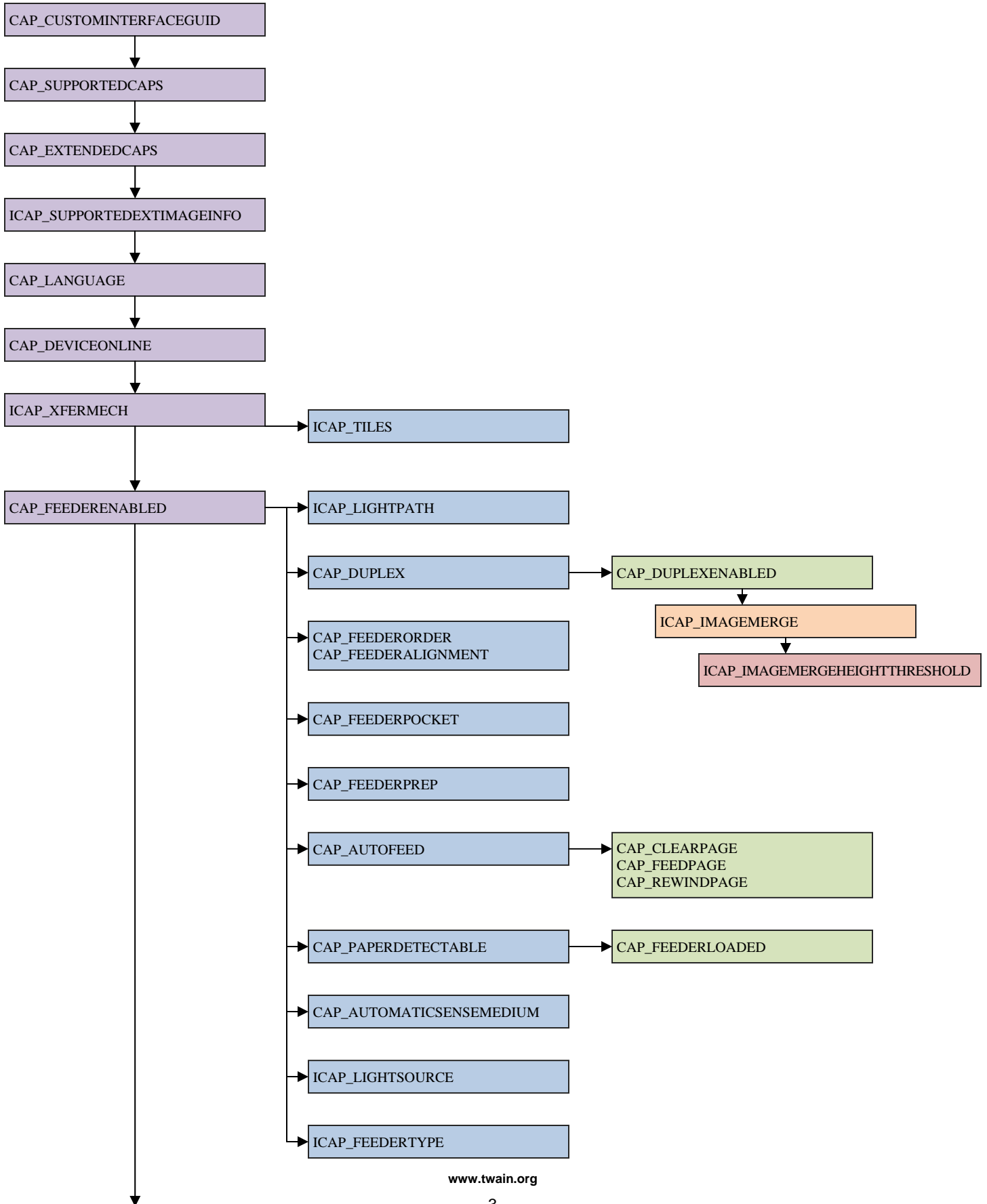
## Semi-Independent Capabilities

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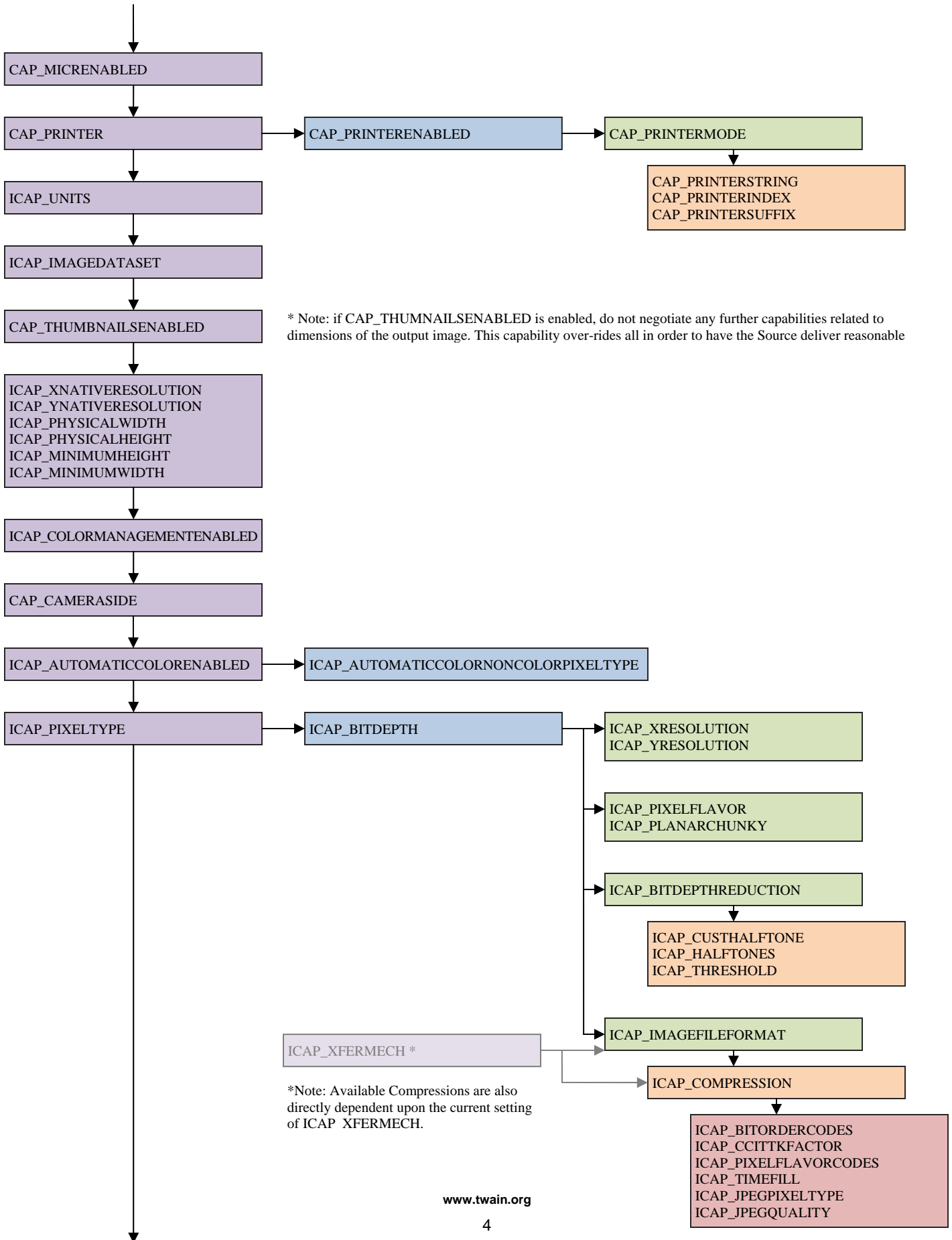
Semi Independent Capabilities are small groups that have little effect on the big picture do have their own pockets of dependencies.



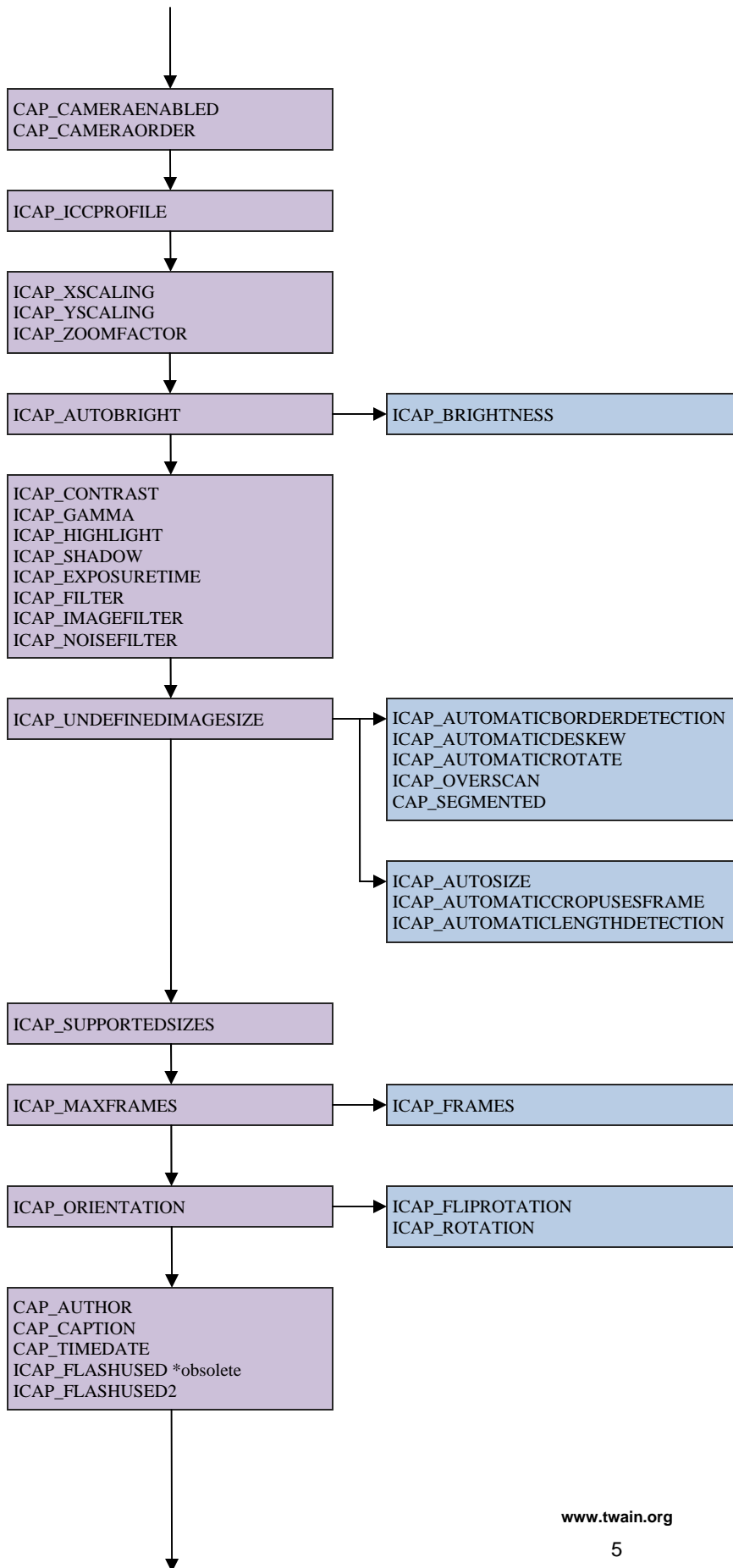
# The Big Picture of Dependant Capabilities (1 of 4)



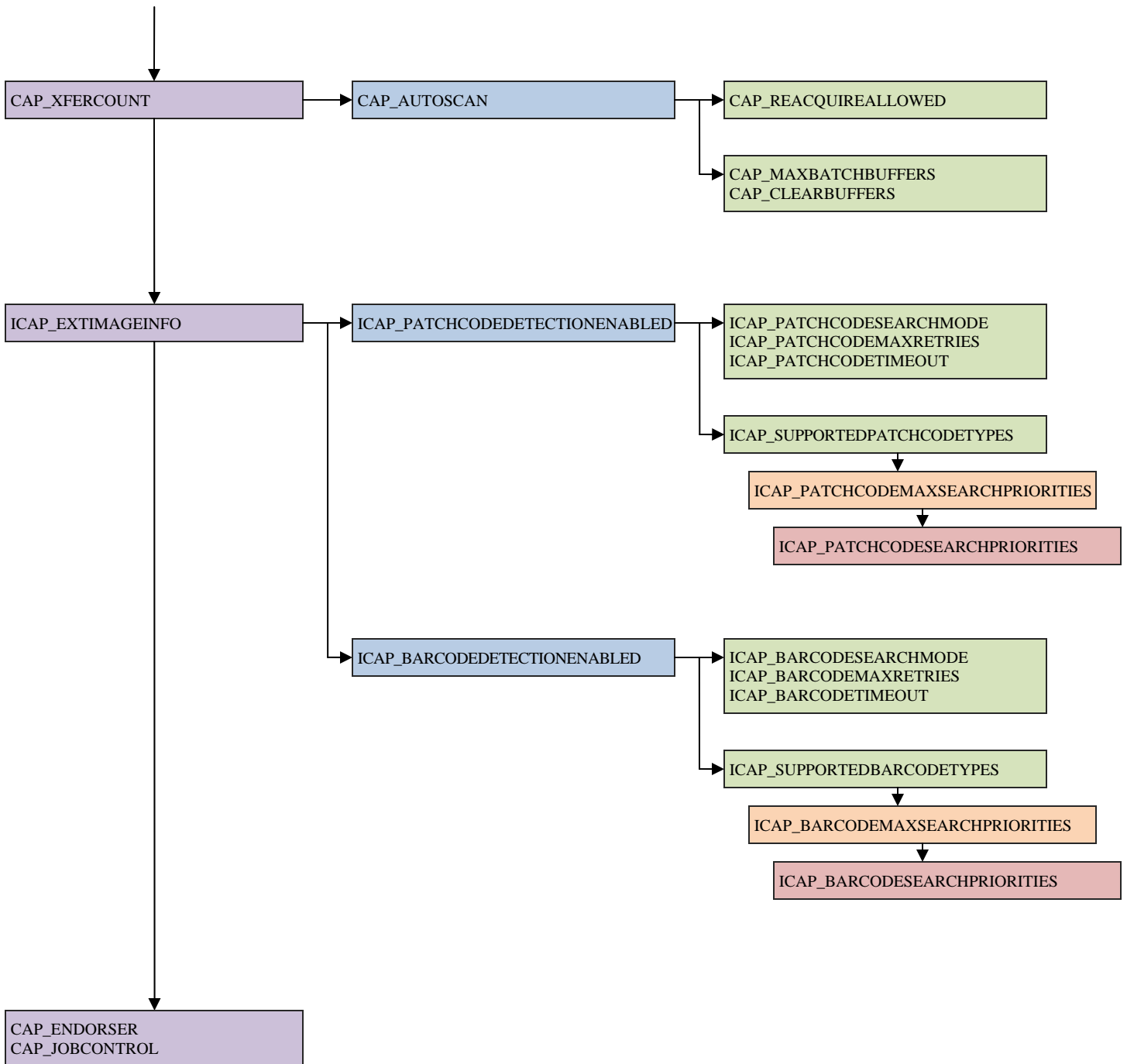
# The Big Picture of Dependant Capabilities (2 of 4)



# The Big Picture of Dependant Capabilities (3 of 4)



# The Big Picture of Dependent Capabilities (4 of 4)



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