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| **ID #** | **Architectural Driver** | **Type** | **Ranking** | **Explanation** |
| 1 | The system design shall support increased efficiency of collaboration between geographically dispersed employees | Design Concern/Purpose | (H, H) | A business goal of the system is to “make it easier for its geographically dispersed teams to collaborate with each other.” This driver is representative of how the software shall be built to support that goal. |
| 2 | The system design shall allow for the product to differentiate itself in the product in a competitive market | Design Concern/Purpose | (H, H) | Another business goal would be to be able to differentiate our product from existing products of the market. This is a new product that will combine 5 different features, so the architecture of the software shall support that. |
| 3 | The system shall reduce employee downtime and increase productivity | Design Concern/Purpose | (H, L) | This driver explains the purpose of the system and answers the question: why is it being built? |
| 4 | The 5 services are available to use 99% of the time | Quality attribute Requirement (Usability)  A user attempts to access any of the 5 services. They are able to connect and use any of the services at any time. | (H, M) | The success of the product relies on users being able to actually use the product whenever it is best suited for them. If one service is down, users should be able to rely on any of the other 4 to still communicate. |
| 5 | The system shall resolve or notify user of network connection issues within 10 microseconds | Quality Attribute Requirement (Performance)  The system detects a change in connection strength or availability while a user is using a service. It will try to reconfigure the settings for an optimal connection within 10 microseconds or it will alert the user of possible network disruption. | (M, M) | If the system detects a network issue, it will attempt to resolve or at least notify the user of what the issue is. There may be instances where neither is possible, but providing user with as much information as possible will increase user satisfaction. |
| 6 | The system shall compress all data without loss of any bytes to improve data transfer. | Quality Attribute Requirement (Performance)  When a users’ data in any of the 5 services is sent to the server, it will be compressed and then decompressed once the client receives it. No packets will be dropped. | (L, M) | The architectural drivers of data compression can optimize data transfer efficiency, reduce network bandwidth usage, and provide a reliable and user-friendly experience for collaborating teams. |
| 7 | The system shall have authentication to verify users' identity and access privileges based on their role. | Quality Attribute Requirement  (Security)  A user will sign into the product and the system will verify the credentials. Once authenticated, only features that are within the users’ role permission will be available. | (H, H) | This driver ensures that only authorized users can access the system's features and data, thereby maintaining security and protecting sensitive information. |
| 8 | The system shall support 5 different services including voice communication, video conferencing, instant chat, file sharing, and collaborative whiteboarding. | Primary Functionality | (H, H) | This is the base functionality that the system much achieve. |
| 9 | Real-time features such as voice, video, and whiteboarding shall have a response time of no more than 100ms. | Primary Functionality | (M, L) | The primary functionality driver comes from the request of the customer that it’s “critical operations” be “highly responsive”. |
| 10 | The system must be profitable | Primary Functionality | (H, M) | The product must be built in a way that will make it profitable in the long run. If it doesn’t make money, then the system won’t continue to be supported. |
| 11 | The 5 system components shall be developed and run independently within the system | Architectural Concern | (M, M) | This architectural driver will allow for each component of the system to be developed in parallel and each service will be able to function independently of the other services. |
| 12 | The system shall be continuously and quickly deployable | Architectural Concern | (L, L) | Deployments of the system should be as quick and easy as possible so that changes can be made available to the users as soon as possible |
| 13 | Metadata for the system shall be stored in a database | Architectural Concern | (L, L) | The system design will need to include a way to store system metadata so that it can be used for debugging, analytics, etc. |
| 14 | The system shall be able to support a variety of hardware and operating system inputs and outputs | Constraint | (H, H) | The system must be able to work on any device, accept input from multiple devices, and output to multiple devices. We have no control over end-user client devices. |
| 15 | Any registered user must be over the age of 13 | Constraint | (M, H) | This legal constraint comes from laws that prohibit the collection of data from users under the age of 13. |