

| ID | Description | Associated Feature | Probability | Impact (weeks) | Risk Exposure (weeks) | First Indicator | Mitigation Approach |
|----|---|--|-------------|----------------|-----------------------|---|--|
| 1 | Large number of clients may cause issues generating risk efficiently against weather data | Assigning risks to devices | 0.7 | 2 | 1.4 | Team struggles to find way to send all geolocations through risk algorithm | We are planning to budget time to address large numbers of clients. Code will have to be implemented in a manner that can efficiently make requests and render information. |
| 2 | Running in to troubles learning iOS | Mobile | 0.3 | 1 | 0.3 | Team member unfamiliar with iOS needs to work on feature | Use Jake as a resource to lead mobile development and help other team members. |
| 3 | Displaying crowded mixes of low and high risk areas. | Web App (Map) | 0.5 | 1 | 0.5 | First time we display a large amount of crowded devices of variable risk. | Improve view implementation to display large number of devices more appropriately. |
| 4 | Mock Data: Mocking existing Datto device database | Datto DB | 0.1 | 1 | 0.1 | Integration time - using real Datto system instead of mocks. | Get a table schema of Datto's devices table from Chris so that it matches as closely as possible. |
| 5 | Mock Data: Mocking /devices API that Datto will create to return devices + hit MaxMind (mocked) + specify JSON return format. | Datto endpoint does not exist - Datto will create this | 0.2 | 1 | 0.2 | Integration time - using real Datto system instead of mocks. | Very clearly define JSON spec, so that Datto implements exactly what we expect. |
| 6 | Mock Data: Mocking an OAuth server that Datto will create | Login + Datto OAuth server (does not exist) | 0.7 | 2 | 1.4 | Integration time - using real Datto system instead of mocks. | Follow OAuth standards as closely as possible. |
| 7 | Mock Data: Mocking MSP login data | Login + Datto DB (MSP table) | 0.1 | 1 | 0.1 | Integration time - using real Datto system instead of mocks. | Get a table schema of Datto's devices table from Chris so that it matches as closely as possible. |
| 8 | Having to switch weather tracking API based on risk algorithm | Showing risk levels | 0.2 | 2 | 0.4 | Risk algorithm requires more information than weather tracking API provides. | Spend extra time researching weather tracking options. Spend time early on thinking about what is needed for risk algorithm. |
| 9 | Risk algorithm based on weather does not provide an accurate risk assessment | Showing risk levels | 0.2 | 1 | 0.2 | Risk on the map does not accurately represent the current weather pattern's danger level. | Take the necessary time to calculate a proper algorithm by studying up upon weather patterns and other aspects of risk factor. |
| 10 | Database Schema may need modifications to enable proper risk level generation | Showing risk levels | 0.4 | 1 | 0.4 | Risk algorithm requires persisting of information | Plan thoroughly ahead for risk algorithm. We are adding time to our schedule to accomodate downstream changes that the algorithm might bring. |
| 11 | Push notifications are not reliable | Mobile | 0.1 | 1 | 0.1 | Push notifications are not being recieved during testing | Lots of resources are available to make sending push notifications easy and more reliable. We will utilize these resources to avoid running into issues and make development easier. |
| 12 | OAuth Client for the mobile app may more complex than intially thought | Mobile | 0.2 | 1 | 0.2 | Solution is hard to follow or very obvious it will take more time than expected. | Research plenty of options for apporaching it and plan on how to go about it the most efficient way possible. |
| 13 | Code to render dotmap is very complex | Showing devices/risk levels | 0.4 | 1 | 0.4 | Changes to dotmap are tough to implement | Attempt to refactor the page to be simpler and very well documented. |