/r/Ingress FAQ
This FAQ is compiled and maintained by redditors from /r/Ingress

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**What is Ingress?**
Ingress is an Augmented Reality game created by Niantic Labs, a division of Google. In the game lore, which has been unfolding on the official Investigation Board day by day since November 1st, 2012, an alien race known by humans as “Shapers” is attempting to “upgrade” mankind to the next level of evolution using technology that “reshapes” the minds of the people.

There are two factions in the game, the Enlightened who are trying to assist the shapers, and the Resistance, which are opposing the Shapers (and therefore the Enlightened).

The game centers around the capturing and control of “Portals” which are located at various public points of interest. When a portal is captured, it can be “linked” to other portals. An enclosed triangle of three portals creates a “Control Field” which then blankets the enclosed area to begin the reshaping process (if controlled by the Enlightened) or protect the people from reshaping (if controlled by the Resistance).

Playing the game involves actually traveling to the portal location and interfacing with the portal using an app on your Android phone. Sorry, no iPhone app at this time.

**Before you start**

**What do I need to play Ingress?**

- Ingress is currently a “closed beta”, which means Niantic Labs is testing the game on a limited number of users, and they are slowly rolling out to additional players by distributing activation codes (commonly called an invite). To play Ingress you need an invite. *Note: An activation code is not the same as a passcode, which can only be used after you have activated your account.*
- You need to download the free Ingress app—the “Scanner”—from the Google Play Store. While you can download the app without an invite, you cannot play the game until you enter in your activation code. You can, however, [submit new portals](https://ingress.com/intel).
- Ingress runs on Android devices running Android 2.3 (Gingerbread) or above. The recommended minimum device screen resolution is 480 x 800 pixels
- After entering in your activation code, you will select an Ingress codename and then you will link a google account to serve as your login.
- The main interface for viewing the status of the game outside of the app is the Intel Map. Once your google account is linked, you can access the Intel Map at [ingress.com/intel](https://ingress.com/intel). You cannot access the Intel Map without getting an invite and setting up your Ingress account.

**How can I get an invite?**
1. Go to the Ingress home page and enter your email address. Invites are not necessarily distributed in the order they are requested, but to date no official statements have been made regarding how the queue is processed.

2. Spend time in the #invites IRC channel on IRCHighway. Trivia contests happen several times a day in this channel. Do not beg for invites. While there is no set schedule, one trivia session is usually held around 10:30 a.m. EST. The trivia questions are drawn from information posted on the Niantic Project page.

3. Follow these Niantic/Google employees and official accounts on Google Plus or Facebook: Ingress G+, Ingress Facebook, Joe Philley, Anne Beuttenmüller, Brandon Badger, Brian Rose; and contribute Ingress-themed artwork or media. Be sure to tag those guys, #ingress, and #ingressinvites on your post. Occasionally, Joe Philley has posted activation codes to his stream, but they require fast fingers. You can browse these accounts to see tons of examples of successful submissions.

4. Watch /r/Ingress for invitation giveaways. On occasion, some lucky player will get some invites to give away. Do not post invite requests to /r/Ingress.

5. Post a request to /r/ingressinvites.

6. Search for invites. While activation codes are rarely just floating around, some sites will have giveaways. Many of these giveaways are posited on /r/Ingress.

What can I do while I'm waiting for/trying to get an invite?

- Several methods to get an invite above require knowledge of the Niantic Project backstory. Study the board and visit The Niantic Project Wiki, a reference of the findings of the board and further investigations of the clues by players of the game.

- You can request that someone in the Ingress subreddit post a screenshot of the Intel Map for your area so that you are familiar with the locations of the portals nearby.

- You can submit requests to Niantic to add portals to your area. You can do this after you install the app (even before you receive an invite), by using the following instructions found on the Ingress Help site:

  1. Make sure your GPS on camera app is enabled (Open Camera > Settings > Store location >ON; you may also need to turn on Settings > Location services > Share Picture Location, if available).
  2. Snap a photo with your Android phone with the standard camera app
  3. Select the Share option for the photo
  4. Share to NIA Super Ops (with the Ingress logo)
  5. Enter a proposed title for the Portal and touch OK.
  6. This prepares an email to the Niantic Ops team with the photo and location of the object.
  7. Send the email.
  8. The Niantic operations team will review the picture and object location and then add it to the game database if it meets our general criteria for Portals.

- General Portal criteria:
  - Should be safe and accessible to the public
  - Example types of objects:
    - Statues
    - Unique architecture
    - Outdoor murals
    - Historic buildings
Getting Started

2. Obtain an invitation
   The starter missions will walk you through some of the basics of the game, including collecting XM, Establishing Portals, using Resonators, creating links, and creating fields.
4. Choose your agent name and Faction
   Upon completion of the starter missions, you will be asked to choose an agent name and your faction.

   There are a variety of reasons why you may choose your faction. However, it is recommended that you take a look at the intel map and see how things are in the area where you will be playing. Some players are finding at this point that the few players in their area are all on the same side - this will not allow you very many opportunities to do anything, and leveling will be very slow.
5. Be sure to check out the Ingress Help Page for basic information starting out.

Gameplay Basics

These are the basic details on playing the game. Further details and rules affecting how and when you can take these actions can be found in the linked sections of this FAQ.

- You find Portals and physically travel to them
- You hack portals for the possibility of getting Items: Resonators, XMPs, Portal Keys, Portal Shields, and Media.
- You deploy resonators on a portal to capture it for your faction.
- Once you fill all 8 resonators slots for a portal, you can link it to another portal that also has 8 resonators on it, and that you have a portal key for, to create a Link.
- When you create a triangle of three linked portals, you create a Control Field.
  Depending on the size of the field, you will get a number of Mind Units (MUs) for your faction. MUs are the overall score that is used to determine which Faction is winning.
Some actions in the game give you **Action Points** (AP). Your level in the game is based on your AP, and it is the score that your personal progress is measured by.

Some actions in the game reduce your **Exotic Matter** (XM) count and you cannot take these actions if your XM count is not sufficient. Travelling through areas containing XM will replenish your XM count.

**Factions**

1. **Which faction should I choose?**
   The short answer is that if you want to play the character of an agent assisting the Shapers, choose Enlightened, and if you want to help fight the Shapers, choose Resistance. A couple of other factors you may consider in making your choice:
   a. The app will often suggest a faction for you, and it is guessed that this is based on keeping the sides relatively balanced.
   b. Many players find the game to be more fun, with more opportunities to level, when the factions are balanced locally - you may want to request that someone in /r/ingress post a screenshot of your area before you choose.

2. **How can I tell which players and portals belong to which faction?**
   Within the game and the Intel Map, Enlightened portals are marked in green and Resistance in Blue. Both the scanner app and the Intel Map contain a “COMM” which is a combination of chat between players and notifications of actions by players such as capturing portals or destroying links. Player names in the COMM are also colored blue and green depending on faction.

3. **How can I communicate with players on my faction in the game?**
   The COMM contains two tabs: ALL and FACTION. If you transmit on the ALL channel, all players in the area will be able to see your communication. If you transmit on the FACTION channel, you will see that your message is prepended with “[secure]” meaning that only other members of your faction can see it.

4. **Can I change my faction?**
   You can request a faction change but there are some major downsides. Here is the official directive regarding name changes from Niantic:
   - One faction change per player.
   - Players Once a player’s application for a faction change is received, a may apply for a faction change via the Ingress help center, but because faction changes affect other players, they are not guaranteed.
   - decision on whether the change is accepted or rejected will be made within 2-3 weeks.

   If a faction change application is accepted, that player’s Portals, Resonators or other items obtained will be lost. If one of your teammates changes allegiances, you may see NIAOPSDAEMONX destroying entities. Do not be alarmed, all traitor activity must be wiped. Some of your related entities may be destroyed in the process, but it is for your own good and the security of your faction.
**AP and Leveling**

1. **What is AP?**
   
   AP stands for “Action Points.” Essentially, it is the same thing as “XP” as most gamers are familiar with. You acquire AP through a variety of actions in the game, and your AP is used to determine your level.

2. **How do I get AP?**
   
   There are a variety of ways to gain AP:

<table>
<thead>
<tr>
<th>Action</th>
<th>Action Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hack a portal (Neutral or Enemy)</td>
<td>100 AP</td>
</tr>
<tr>
<td>Hack a portal (Own Faction)</td>
<td>0 AP</td>
</tr>
<tr>
<td>Recharge a Portal</td>
<td>0 AP</td>
</tr>
<tr>
<td>Place a resonator (new resonator)</td>
<td>125 AP</td>
</tr>
<tr>
<td>Upgrade a resonator</td>
<td>0 AP</td>
</tr>
<tr>
<td>Capturing a portal (place the first resonator)</td>
<td>500 AP</td>
</tr>
<tr>
<td>Complete a portal (place the eighth resonator)</td>
<td>250 AP</td>
</tr>
<tr>
<td>Link two portals</td>
<td>313 AP</td>
</tr>
<tr>
<td>Establish a control field</td>
<td>1250 AP</td>
</tr>
<tr>
<td>Apply a portal shield</td>
<td>150 AP</td>
</tr>
<tr>
<td>Destroy a resonator</td>
<td>75 AP</td>
</tr>
<tr>
<td>Destroy a link</td>
<td>187 AP</td>
</tr>
<tr>
<td>Destroy a control field</td>
<td>750 AP</td>
</tr>
</tbody>
</table>

   **Source:** [http://ingressfieldguide.com/content/action-points-ap-leveling](http://ingressfieldguide.com/content/action-points-ap-leveling)

3. **How do I see how much AP I have?**
   
   You can view your current AP in the app by pressing on the octagon containing your current level on the upper left corner.
   
   You can also view your current AP on the Intel page

4. **How much AP is needed to gain a level?**

   Each level requires an increasing amount of AP to gain the next level. Level
breakdowns are as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>10,000</td>
</tr>
<tr>
<td>3</td>
<td>30,000</td>
</tr>
<tr>
<td>4</td>
<td>70,000</td>
</tr>
<tr>
<td>5</td>
<td>150,000</td>
</tr>
<tr>
<td>6</td>
<td>300,000</td>
</tr>
<tr>
<td>7</td>
<td>600,000</td>
</tr>
<tr>
<td>8</td>
<td>1,200,000</td>
</tr>
</tbody>
</table>

Source: [http://ingressfieldguide.com/content/action-points-ap-leveling](http://ingressfieldguide.com/content/action-points-ap-leveling)

5. What do I get by achieving higher levels?
You can only deploy resonators and fire XMPs of your current level or below. By attaining higher levels you are able to build stronger portals and to successfully attack higher level portals. Additionally, at each level the amount of XM you can collect grows.

6. Do I get invites to recruit other players at a certain level?
No. At this time the only way to get invites to recruit players is if you are granted invites by Niantic.

XM

1. What is XM?
XM stands for “Exotic Matter”. XM is all over the place, which is good since is needed to take many actions within the game. XM is represented as glowing blue dots throughout the world. XM tends to appear more around areas of high mobile phone usage so near public transport stops and city centres. If your XM reaches “critical levels” (below 1%) your scanner will become fuzzy until you regain sufficient XM.

2. How do I get XM?
Approach the XM on the map. When you are in range (40 meters, shown by the ring around your position), the XM will be drawn to your scanner and added to your total carried. XM can also be obtained by using passcodes. The XM you collect disappears from the game until it naturally regenerates after an hour or so.

3. How much XM can I have? (or: Why can’t I pick up more XM?)
The bar next to your level shows how much XM you have relative to your total capacity. Capacity increases along with your level. Once you have reached 100%, you cannot pick up any more XM.
<table>
<thead>
<tr>
<th>Level</th>
<th>XM Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3000</td>
</tr>
<tr>
<td>2</td>
<td>4000</td>
</tr>
<tr>
<td>3</td>
<td>5000</td>
</tr>
<tr>
<td>4</td>
<td>6000</td>
</tr>
<tr>
<td>5</td>
<td>7000</td>
</tr>
<tr>
<td>6</td>
<td>8000</td>
</tr>
<tr>
<td>7</td>
<td>9000</td>
</tr>
<tr>
<td>8</td>
<td>10000</td>
</tr>
</tbody>
</table>

Source: [http://ingressfieldguide.com/content/action-points-ap-leveling](http://ingressfieldguide.com/content/action-points-ap-leveling)

4. **Does XM contribute to my AP?**
   No.

5. **How do I lose XM?**
   a. Placing or recharging a resonator
   b. Hacking a portal
   c. Being attacked by an enemy portal
   d. Attacking enemy resonators (using XMPs)
   e. Creating a link

**Portals**

1. **What is a portal?**
   A Portal is a “gateway” established by the shapers, and is used to create links and fields.

2. **Where can I find portals?**
   Portals can be found at publicly-accessible culturally significant locations including statues, unique architecture, outdoor murals, historic buildings, libraries, post offices, and some firehouses. You can view all portals on the Intel Map once you’ve activated the game, but visible portals are on the map are dependent on zoom level - to see unclaimed portals you will need to be zoomed in to about the neighborhood level.

   Niantic created many of the portals using sources of data used in their other app, Field Trip. One of the sources is the Historic Marker Database, and you can use it as a reference to find possible portals outside the game. Also, Field Trip has an option to alert you to nearby portals.
3. **What is “Hacking” a portal?**
   “Hacking” a portal is the act of accessing the portal in order to obtain **Keys**, **Resonators**, **Bursters**, and **Media**.

4. **How do I hack a portal?**
   a. Target the portal on your scanner
   b. Make sure that you are within range (< 40 meters)
   c. Click the “Hack” button

5. **How do I get higher level items from hacking?**
   It appears that you get better items by hacking friendly portals than hostile ones. Also, the level of the items you receive is loosely tied to the level of the portal. It seems that the higher level portal you hack, the higher level items you will receive.

6. **How often can I hack a portal?**
   There are two “cooldown” timers associated with hacking a portal multiple times:
   a. “Cooldown” - 5 minute between hack attempts. If you try to hack again too quickly, you will receive a message that the portal is “running hot” along with the amount of time until you can hack it again.
   b. “Burnout” - if you hack the same portal 4 times in a 4 hour period, the portal will “burn out” and you will not be able to access it for 4 hours.

   Note that these timers are based on the unique combination of player and portal: Multiple users can hack the same portal without triggering the cooldown for other players, and a player may hack more than one portal within the cooldown period.

7. **How do I take control of a portal?**
   An unclaimed (or neutral) portal can be taken by placing a resonator on it. If the portal is already taken by the enemy, all of the enemy resonators must be destroyed (by XMPs or by natural resonator decay) to make the portal neutral before claiming.

8. **How do I upgrade a portal?**
   There are two kinds of upgrades: Upgrading the resonators and adding mods. Both are done by selecting the portal and (when in range) choosing Upgrade Portal.
   **To upgrade or add a resonator**, select the resonator (or empty slot) you would like to upgrade, choose the level of resonator you wish to place, and confirm.
   **To add a mod**, select an empty one of the four slots above the resonators and choose a modification to add.

9. **How is portal level determined?**
   The portal’s level is the average of the level of all of the resonators placed on it. While your scanner will only display a whole number, the actual level of a portal can be in between whole levels.

10. **How do I report duplicate portals or inaccurate/inaccessible portal locations?**
    a. Visit the [Ingress Help](#) page, and click “Contact Us” in the upper right.
    b. Select “Report an issue with a portal” from the list of options
    c. Select the relevant issue and follow the instructions to report it.
Resonators

1. **What is a resonator?**
   A resonator is a device used by both factions to control the portals. In order for any player to "own" or capture a portal, they must place down at least one resonator. The resonators also have the capability to attack other players of the opposing faction as a defense.

2. **What is the difference between resonator levels?**
   The level of the resonator determines how much energy it has. Because attacks on resonators work by wearing down that energy, higher level resonators are harder to destroy.

3. **How do I deploy a resonator?**
   There are two ways to deploy a resonator. You can choose "Deploy" and a theor. For both you will need to be in the app and while in range, select the portal. The lowest level resonator you have (usually level 1) will be deployed.
   a. You can choose “Upgrade Portal”, select the resonator slot you would like to deploy to, press Deploy, then choose which level resonator in your inventory you want to deploy to that slot.

   *N.B. Your distance from the portal when deploying a resonator affects its distance from the portal. To maximise the spread of the resonators stand as far as possible from the portal when deploying resonators.*

4. **How do I upgrade an existing resonator?**
   In the app and while in range, select the portal. Choose Upgrade Portal, select the resonator you would like to upgrade, press Upgrade, then choose which resonator you would like to upgrade with. Note that it will default to the lowest level you have available every time--you will have to select the level you want to use.

5. **Why can’t I use a Level x resonator?**
   a. The highest level resonator you can use is your current level.
   b. Additionally, you can only place a certain number of resonators of a certain level per portal; you can place eight level one resonators, but only one level eight. This restriction is independent of your current level. (Note: this is *per player*. Eight players could each place a level eight resonator on one portal.)

**Breakdown:**

<table>
<thead>
<tr>
<th>Resonator Level</th>
<th>Max # Per Portal (from one player)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
6. **What does it mean for a resonator to decay? How can I stop this?**
   Resonators have enough energy to last only ten days, assuming they are left alone. However, they can be recharged using XM by anyone in your faction.

7. **Is it possible to recharge portal resonators remotely?**
   Yes, but only with a key to that portal. The further from a portal you are, the less percent of resonators "life" are recharged. If somebody attacks your portal, it's the only way to defend it from a distance.

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**Portal Mods**

1. **What is a portal mod?**
   A portal mod is an additional item you can add to a portal to defend it. There are four slots for portal mods on each portal, and unlike resonators, there is no limit to the amount of portal mods a single player can deploy to a portal. At this time there is only one kind of portal mod: portal shields.

2. **What is a portal shield?**

3. **How do I deploy a portal mod?**
   Portal mods are deployed in much the same way as resonators are upgraded. First, when in range of the portal you wish to apply the mod to (it must be controlled by your team) select it and tap the “upgrade” button. At the top of the screen there are four pale blue boxes representing the four slots in which mods can be deployed. Select one of these slots then select the mod you wish to apply.

4. **How do I upgrade a portal mod?**

5. **What are the levels of portal shields?**

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**Keys**

1. **What is a portal key?**
   A portal key is a device that allows you to view a specific portal that has been hacked into. It will only access the portal from which it was retrieved.

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Source: [http://ingressfieldguide.com/content/portals-linking](http://ingressfieldguide.com/content/portals-linking)
2. **What can I do with a portal key?**
   If you have the key to a portal, you can link to that portal from another (if it is in range) and recharge that portal's resonators remotely.

3. **Do portal keys work forever?**
   If you link to a portal using its key, the key is used up and you will have to hack the portal again to obtain another.

4. **Can you have more than one key to a single portal?**
   Yes and no. If you have the key to a portal in your inventory, you can NOT gain another through hacking. However, you can *drop* the key, hack the portal for another, and pick your old key back up--placing two keys to the same portal in your inventory.

**Media**

1. **What is Media?**
   Media is a special drop obtained by hacking a portal. It will generally be an image of a picture or document, or a video file. These files tie in with the ongoing “investigation” as part of the game lore. Investigators can use a variety of methods to sometimes obtain passcodes from decrypting clues found in the media.

**XMP Bursters**

1. **What is an XMP Burster?**
   XMP Bursters are offensive weapons used against opposing faction portals. They function somewhat like a bomb, causing the greatest damage at the point of impact, with damage radiating outwards in a 360 degree radius, with the damage diminishing as the distance from the “point of impact” increases. A burster will always be fired from the point where you are standing.

2. **How do I use a Burster?**
   There are two ways to deploy a burster:
   a. If you press and hold on your screen, a small menu will appear, the “top” option will be “Fire XMP.” This will automatically select one of the highest level usable bursters in your inventory.
   b. Enter the “Ops” menu, select the burster level you wish to use, and select the “fire” button.

3. **Why can’t I use a Level x Burster?**
   The highest level burster you can use is your current level.

4. **How powerful is a burster?**
   As bursters go up in levels, the increase in both damage dealt and damage radius:

<table>
<thead>
<tr>
<th>Level</th>
<th>Range</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<tr>
<td>1</td>
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</tr>
<tr>
<td>6</td>
<td>200</td>
<td>1500</td>
</tr>
<tr>
<td>7</td>
<td>300</td>
<td>1800</td>
</tr>
<tr>
<td>8</td>
<td>400</td>
<td>2700</td>
</tr>
</tbody>
</table>

Source: [http://ingressfieldguide.com/content/xmp-bursters-attacking-enemy-portals](http://ingressfieldguide.com/content/xmp-bursters-attacking-enemy-portals)
Burster damage over distance, by level:

![XMP Burster Range & Damage](http://ingressportal.com/research/attacking/)


**Links**

1. **What is a Link?**
   A link is a line between two portals, connecting them.

2. **How do I create a link?**
   a. To initiate a link, you must be at the portal you wish to have originate the link.
   b. Target the portal.
   c. In the portal information screen, select “Link Portals.” The scanner will then look through your inventory of keys to see if there is a portal you can link to.
   d. Select the key for the portal you wish to link to, and select “confirm.”

3. **What determines link distance?**
   Link distance is determined by the precise portal level, which is calculated by the average level of all resonators on the portal. This can be different than the portal level displayed when you select it, which represents the precise level rounded down to the nearest whole number. The precise link distance can be calculated by the following formula:

   $$(\text{Average Resonator Level})^4 \times 160 \text{ m}$$

As a general reference:
### Portal Level vs Range

<table>
<thead>
<tr>
<th>Portal Level</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>160 m</td>
</tr>
<tr>
<td>2</td>
<td>2.56 km</td>
</tr>
<tr>
<td>3</td>
<td>12.96 km</td>
</tr>
<tr>
<td>4</td>
<td>40.96 km</td>
</tr>
<tr>
<td>5</td>
<td>100 km</td>
</tr>
<tr>
<td>6</td>
<td>207.36 km</td>
</tr>
<tr>
<td>7</td>
<td>384.16 km</td>
</tr>
<tr>
<td>8</td>
<td>655.36 km</td>
</tr>
</tbody>
</table>

Source: [http://ingressfieldguide.com/content/portals-linking](http://ingressfieldguide.com/content/portals-linking)

4. **How many links can one portal have?**
   Currently it seems that a portal can have a maximum of 12 links, of which a maximum of 8 can be originating from the portal. More info: [http://decodeingress.wordpress.com/category/game-logic-2/](http://decodeingress.wordpress.com/category/game-logic-2/)

5. **Why can't I create a link?**
   There are several reasons why you may not be able to create a link:
   - You are trying to link to an opposing faction portal.
   - The portal resonators are not strong enough to create a link of that distance.
   - There is another link that blocks the establishment of your link. No links can cross (friendly or hostile).
   - You do not have the key for the remote portal.
   - You may have reached the maximum number of links that can be originated by the portal, or the maximum number of links total to the remote portal.

If you have the key for a portal you wish to link to, and are not sure why it won't like, hit the link button from the originating portal, and scroll to the key for the target portal. The scanner should tell you why you cannot link.
Control Fields

1. **What is a control field?**
   A control field is an area of coverage made up by (exactly) three connected links to control/protect “Mind Units” contained within the field. How many “Mind Units” are determined by the area of the field and the population density within that field.

2. **What are Mind Units?**
   Mind Units (MUs) are the way the overall game is scored. You can see the total number of MUs earned by each faction in the upper right of the Intel screen, or in the app by clicking OPS and then selecting the Intel tab.

3. **How do I create a field?**
   A field is a triangle created by linking 3 portals together. When the triangle is established, the field is automatically created.

4. **Can a field surround other fields?**
   Sometimes.
   a. You can create a field completely surrounding another one, as long as none of the links cross.
   b. It’s more limited if you want to create a field inside an existing field. If a portal is inside a field, you cannot link from it, but you can link to it from one of the portals on the edge of the containing field. If you connect two “corners” of the field to this inner portal you will create an overlapping inner field. Since you can’t link from a portal owned by the competing faction, you can’t create a field inside an existing opponent’s field.

   MUs for overlapping fields are calculated based on inclusion in fields - so if a friendly field exists within another friendly field, then those “Mind Units” are counted twice toward the overall faction score. Similarly, one faction’s field can exist within another faction’s field.

5. **When creating a field, is the MU also gained as AP?**
   No.

6. **I’ve linked three portals in a triangle but a field wasn’t created. What’s up with that?**
   Zoom way in on the intel map. Almost always you’ll find that you’ve accidentally linked to a fourth portal and there is no triangle.

Passcodes

1. **What is a passcode?**
   Passcodes are short codes that are worth in-game items. Usually a passcode rewards the user with some amount of AP, XM, and some combination of resonators, bursters, and media. They are not invites to play the game and will not work as activation codes - they are only useful for people who are already playing.

2. **Why are my passcodes already expired?**
Passcodes are first-come first-serve - there is a limited number of times a given passcode can be used. Depending on a passcode exposure, it may expire anywhere from a few hours to a few days after it is first discovered. The Ingress subreddit often has posts about newly discovered passcodes - because of the high visibility of that page, once they’re posted on the subreddit or Google+ they usually expire within an hour.

3. **How can I find my own passcodes?**
   Niantic Project posts the same puzzles in a couple different locations:
   - http://www.nianticproject.com/
   - https://plus.google.com/+NianticProject/posts
   You can also check out irc://irc.irchighway.net/niantic2, an IRC channel where players try to solve the puzzles.

**Strategy**

The aim of the game is to create fields over the greatest population possible in order to control the most MU. The vulnerable points of any field are at its portals. As such, the importance of any one portal should be minimised. To do this, one should use all of the available portals within the area of the greatest possible contiguous field to create a network of small constituent fields... and **plan ahead!** A good network of fields should have a fairly even distribution of links to each portal so that there are no obvious weak spots for the opposing team to target. Devote greater resources to portals with more links as they should be more heavily fortified.

Portals themselves do not provide MU for your team, so when capturing portals consider where you will create a field.

**Helpful Tools and References**

1. **Official sites for game**
   - Ingress home page
   - Ingress Intel (available after activation)
2. **Official site for game background information**
   - Niantic Project Conspiracy Board
3. **Providing feedback to Niantic**
   - Ingress Help → Contact Us (right upper corner) → Provide feedback or Report a bug
4. **How do you report suspected cheating?**
   - Cheating in ingress includes: playing with multiple accounts; sharing accounts; using tools or techniques to alter or falsify your location; or selling or trading accounts.
   - To report cheating, go to Ingress Help → Contact Us (right upper corner) → Report abuse → Cheating
5. **Dealing with Police while playing Ingress**
   - As this game involves walking around a lot of public sites, it’s quite possible to run into police, especially if you’re wandering around at night. **This guide** may help you to stay out of trouble.