

# D20PRO 3.7.3.X BETA - 3.7.4 FULL RELEASE

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## **v.3.7.4 FULL RELEASE**

- Updated the campaign templates to be proper skeletal templates. Full text releases and licensed releases will be available from the D20PRO Marketplace.
- Added fall back base attack in the event a creature is not configured with an attack already. A simple slam attack is added to the creature when an attack attempt is made.
- Added catch for issue with legacy NO ABILITY calculations for attacks and damages.
- Added "-" value handler for creature stats. Placing a - in the Base value for a creature stat will result in the NO\_ABILITY applicator applying. Please note, this does not play well with modifiers at this point – different systems have very different rules for how to handle a null stat getting a stat mod from magic or science...
- Updated the extension and overlay (dice box) systems to provide access to logging and broadcast logging. This is still a very, very early system and does not share state between player and host (GM). That will come down the pipe soon, however.
- Added 'owned' to script options for accessing a list of creatures owned by the current player/gm.
- Fixed lingering bug with feature based attacks and ER processing.
- Identified issue with weapons types which was causing some systems to apply a 1.5x multiplier for ability score bonus damage. Fixed this and moved the multiplier controls to the Rules API for individual system customizations.

## **v.3.7.4 (RC2) BETA**

- Found and fixed bug which was preventing traits/items from being created due to the search list filter wrapper.
- Work around for exporting creatures with encrypted images applied to enable export (I'm looking at you PHB folks!)
- Changed casting in-line feature update confirmation message to not be as misleading... editing a feature from the casting decision never changes the feature in the library – ever.

- Fixed upgrade bug for SpellCasterTemplate\_Cleric where forward casting from 3.7.3 and earlier was not picking up the class switch to the new generic casting template (SpellCasterTemplate\_Prepared, the soon-to-be-refactored).

## **v.3.7.4 (RC1) BETA**

- Found and fixed a bug related to equipped traits and items.
- Fixed an inverted logic check for the import of classes and spells on initial app launch.
- Fixed bug with money which was preventing money from showing up in the creature editor. This had to do with the expanded rules system which allows variable currencies to be used between game systems.
- Updated spell and class import to use a synchronized, atomic operation which prevents potential data loss if the app closes unexpectedly or something gets canceled.
- Updated the spell import to use the Campaign name as the Module/Product to help differentiate imported spells from product spells. For content creators, this allows for pre-population of spells with the correct campaign/module/product name when a class definition is added to the class library.
- Enabled script view and editing for encrypted scripts (from marketplace products) the intent was that these scripts should serve as examples, instead they were locked down so tight, that they were more like a tease.
- Temporary fix for the items left on the map with features bug where these items have the features removed on reload. The temp solution is to re-sync items against the library on pickup if the item has lost sync. this means that items will return to library default after a game session reload. We'll fix this in a future pass as it only effects a small portion of the community and content.
- Added zoom and pan functionality to the flow view for Features, Spells, and the in-line Effects Editor. To pan around a flow, simply click (left) on any non-node and drag around. You can also use the scroll wheel to scroll vertically across a flow. The zoom level is controlled on the lower left via a slider which ranges from 100% to 25% zoom. This provide enough space for nearly any flow design and certainly will suffice until I can dig deeper into how to make the navigation system more robust.

### **TODO's before full release**

- Update the campaign templates to default to Class Library objects as well as re-import spells for all defaults (the new spell importer will attach campaign names and caster levels to spell entries it adds to the Spell library).

### **TODO's post release**

There are a number of partially complete add-on's in this build which will get updates and completion as we move forward.

- Custom Sheets – flush out and enable shared custom sheets with a proper UI and add-on manager integration.
- Custom Roller – flush out and enable shared custom roller with a proper UI and add-on manager integration.



- Card/Desk Manager – flush out and enable the html5 based card/deck system with UI and add-on manager integration.
- Add-on Manager – this is a new library like system which will be a replacement for "Extensions". The purpose of this system will be to provide common UI for various external or internal add-on's which use web-technology. This can be everything from an integrated Unity3D application to the custom character sheet system. Like many other aspects of D20PRO, add-on's will have the ability to be shared with players or kept private. The Add-on manager will have a PC version as well, allowing players to have access to their own custom elements they want/need while playing, be it a preferred reference source or a full helper application.
- Custom "damage" handler for Heal and Damage panels.
- Customizable output controls for spell/feature resolution. Right now we have a tight grip on the output from this system as it's a beast behind the scenes. However, with some of the updates in this release, we have a better control in place which lets us fetch values from the processing engine on demand. With a UI hook, this will let us control output to the game log, gm panel, notices, etc.

### **V.3.7.3.6 BETA**

- Added a port check range for the Jetty/RPC server which checks available ports between the value specified and 20 ports higher. This is specifically helpful for folks running more than one instance of D20PRO on a single computer.
- Updated the player connect sync system to properly update the players map view automatically when the player connects.
- Added fix for really old maps who's map markers may not be properly encoded for the newer 3.7 engine. If we cannot auto-update your marker, the Map Marker will be changed to use the Shape renderer for a "Circle" until you go in and re-assign the marker icon. This is a fail safe to prevent maps from failing to load due to disconnected marker icons.
- Fixed speeds UI so it works for all creatures, new and old. Even if you swap rule sets.
- Updated and corrected state aggregation as well as saving throw assignments for legacy creatures. Note: Feat bonuses are not auto-added using this system. You may want to peek at your creatures for things like Greater Fortitude and adjust accordingly!
- Updated the "isSpellcaster" checks for the Creature Editor to omit classes without spell lists from the Spells tab. If a class should have spells here, just add a spells=|| type entry to the class definition.
- Fixed the import prompt check for importing from legacy classes.txt files.
- Added mechanism to auto-import spells from classes in play on game load or when the class is first accessed for casting or creature editing. This is new functionality and mileage may vary. keep an eye out for duplicates and let us know via discord and/or forums if this occurs! With this mechanic in play, we should no longer need to import from spells.txt as importing from class definitions will provide spell level along with name for stubbing out new features to handle said spells!

- Updated the map's border to allow for transparent map backgrounds and masking layers – in preparation for video back-grounds.
- Updated the overall look and feel of the fog of war views. Walls are now colored purple (fill) when in viz or edit modes, masks are a blue/green shade, and edges remain odorless, colorless, dissolves instantly in liquids and one of the deadliest poisons know to man – no wait, that's iocane powder – edges remain harmless but are only visible to the naked eye when in edit mode or when the alt+w key is used to reveal the edge data for all polys on the map.
- Updated some xml scripts for the rules library so they behave better – specifically the addToLog function.

### **TODO's**

- There is a known bug with items which are left on a map and not owned/assigned to a token. These items will lose their properties on reload of the map! So yeah, pick up those items between session for the time being. I'll have this fixed up in short order!
- Still need to move a damages UI to the Damage panel to allow for elemental and dice based damages to be applied.
- Need to provide a mechanism (other than flow editing) to edit damage from spells and features.\
- Implement motion maps via an update mapping engine (going to be a slog, but so worth it)
- Implement blockly visual scripting in place of feature/spell flows and as an optional interface to building javascripts scripts.

### **V.3.7.3.5 BETA**

- Added method to the console (map console) to support zooming to a physical 1" resolution per grid unit.
- Fixed feature saving throw issue which resulted in incorrect saves on a damage update
- Updated Marker editor to use a tabbed interface as well as added a rich-text/html editor for the description area
- Fixed bug where some classes were preventing casters from accessing the Spell list for casting spells
- Fixed bug in the classes library which was causing classes to be saved twice to the stored creatureclasstemplates folder
- Added UI to the options->general pane to allow for zoom-to-scale options. this is a feature designed for folks who would like to use D20PRO on a physical screen with miniatures. It allows you to auto-zoom the view to approximately 1" per grid unit scale based on the pixel dimensions and physical size of your monitor. A key binding is also present for this feature – F8. For Mac users who have suffered the track-pad zoom horrors... this feature can be used to quickly zoom in on a map which has zoom out to infinity and beyond!
- Continued work on the Classes Library. At this point, the library should work as a reliable source for classes. The graphical UI is not ready yet, so it has been disabled for now. Instead you'll find a Source tab which will accept class definitions exactly like the classes.txt file did.



### **Experimental Features:**

*\* Not Quiet Ready For Prime Time*

- HTML Character Sheets - this feature is functional on the GM side, but still needs to be flushed out on the PC side. The plan is to allow the GM to HOST Sheets for creatures which can be accessed by the players. Alternately a PC can add a custom sheet URL to their token to request an override to the GM's selected sheet. Initially the custom sheet will work for GM and GM Hosted, with the PC customization option to follow.
- Custom Roller - the custom roller allows for a third party roller to be used for rolling (visual and result) in the application. The current implementation allows for a custom roller URL to be added (similar to the custom sheets above) which will be called when the Dice Box option is used from a creature menu. The final plan for this feature is to provide a sample custom roller implementation based on Teal Dice which implements the full Java-JavaScript bridge system for injecting rolls from spells, attacks, and the like.
- VERY EXPERIMENTAL (Read: "Will break your experience and probably shouldn't try it") A basic implementation of a jfx wrapper of the D20PRO experience is attached to the Custom Video URL option which will migrate the existing D20PRO UI as well as open up the selected video url as a backdrop. Currently this system does not support zooming and panning of the video background. Eventual functionality will include zooming, panning and proper tiling of video panes vs. the single pane background version current available. Additionally, the PC's will be able to stream the video from the GM as a source or, if a non file:/// url is provided, stream from the source url.

### **TODO's**

- Still need to move a damages UI to the Damage panel to allow for elemental and dice based damages to be applied.
- Need to provide a mechanism (other than flow editing) to edit damage from spells and features.
- Locked option for Zoom Map feature is not yet available. The intent is to allow this toggle to lock zooming for the current view. There is some discussion about how to handle locking of zooming for connected clients. Or if we should offer locking for connected clients but let the GM zoom all they want – see, discussions!

### **USAGE NOTES**

- In the event you are not prompted to import your existing classes, please navigate to the Options->Network/App and click on Refresh Resources. This should present you with an import window which will pull your classes into the Class Library and archive your classes.txt.

- To use the Zoom-to Scale feature, open Options->General and fill in your horizontal (x) and vertical (y) pixel resolution for your target monitor. Then add the physical diagonal dimension in inches. Click save to push to your campaigns preferences, then click Zoom Map to zoom to the chosen physical 1" grid scale. Once this is configured, you can use F8 to zoom to this scale when the map is selected and not in an editor mode.

### **V.3.7.3.4 BETA**

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- Fixed bug with 3.5 derivative rule sets incorrectly calculating saves with feature modifiers.
- Fixed bug with 5e derivative rule sets not properly displaying save highlighting on the creature view/editor.
- More updates to the creature class library – right now things are in a Work-in-Progress state.

### **V.3.7.3.3 BETA**

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- Added the first pass on the Creature Class Template Library – the core service logic is now in place, however, the editor and GM tools are not ready for prime time yet.
- Lots of bug fixes for performance and memory usage.
- Added right click menu map ping support with color options for both PC and GM.
- Refined segmentation system further, speed, shape retention (at higher segmentation values) and rotational targeting fixes for cones and lines.
- Removed the template drawing caps such that templates can be drawn off the map. this is useful in giving edge-case (map) representations for templates.

### **TODO**

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- Continue to refine the custom sheets system to better enable player access to GM populated sheets.
- Debug custom roller issue on PC side.
- GenCon 2018!!!

### **V.3.7.3.2 BETA**

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- Updated map templates to support a segmented-cell mode where selection can occur across a grid-cell (unit) segmentation.
- A global cell segmentation value has been added to the GM-Options->Rules->Unit's section as a drop down supporting values of 1 - 10 where 1 is traditional 1 segment per grid unit, 2 is half cell segmentation, and 10 is 10 segments per grid unit.
- Added per map segmentation values to support a variety of map styles within a given campaign. (not fully functional yet)
- Added custom sheet support for individual creatures which allows each creature to link directly to a remote or local URL for an HTML creature view. This option was added to the "Descriptions" tab of the traditional Creature Editor.
- Added a right click menu option to provide access to either a creature's "Custom Sheet" or the traditional Creature Editor.
- Added an example HTML Rollable table project.
- Updated Script tokens to include *gameNative*, *maps*, *channels* and *casterInPlay*.

- Updated map templates to store map id and grid coordinate origin values. These are used with scripts to enable moving tokens around as the result of scripted feature effects.
- Added the Creature Class Template library with immediate parity with the existing Classes.txt concepts. The plan is to update the UI and extend the capabilities after an initial conversion from text file to resource library.
- Created github storage containers for the Hero Lab Native importer and for the Rules API.
- Updated several of the core scripts to utilize the new FeatureScriptManager bindings.
- Began work on a new map/layer rendering system which will allow for motion maps, layered map assets and more.
- Added bounding box logic to map templates to speed up collision detection for features and effects
- Updated all templates to be segmentation aware in their cell painting methods.

## HEROLAB NATIVE IMPORTER

- basic damage reduction is operational
- fixed attack-to-hit, crit elements
- attacks are now cross-referenced against items and those weighting more than 8lbs become 2-handed attacks

## BUG FIXES

- Fixed bug with reoccurring scripted results and triggered features (GM only). Still working on the fix for the player side.
- Fixed bug with map export containing markers. Markers are not exports along side the map and added to the campaign on import if the marker does not yet exist.
- Major fixes to all feature trigger types with complete functionality for On Caster, On Target, On Stay, On Enter, and On Exit. On Cancel is still not properly executing the effect handler for the On Cancel effect, however, On Cancel effects do properly execute scripts and Features to Run nodes – so not 100% broken there ;)
- Fixed issue with feature library search bar function locking up the app.

## KNOWN ISSUES

- Lights with image values are not exporting the image when attached to a map. Similar issue to the import/export issue we had with markers. A fix is on the way!
- Templates placed at half-grid intervals are not triggering feature events yet.
- Segmentation UI does not impact template placement yet.
- Player Rules Options for custom sheets and custom roller (3d dice) differ from the GM version and need to be updated to match.
- Discovered that scripted game log updates do not push to the global context.
- Pushes to the players are happening too often. The GM is unable to stage actions and activity as a result of this auto-push change. SOLUTION: add a preference for auto-campaign push so as to enable/disable the automatic pushing of GM staged events. PC's will still push events to the GM and subsequently to other players via the GM.

- The current lighting model has the GM calculating lighting on the server and pushing back the lighting model to render on the PC side. We need to alter this method so as to enable lighting calculations on the PC side.
- PC events are not triggering events for features attached to templates.

## v.3.7.3.1 BETA

- Experimental work on HTML based character sheets, 3d dice roller/box, and updated extensions javascript-java bridging.
- Added two options to rules to allow for dedicated URL's for custom sheets and custom dice roller.
- Custom Sheets url is provided access to the creature template by (javascript) 'window.template'.
- Dice Roller url is provided access to the Game Log by (javascript) 'window.gamelog'.
- Several Hero Lab Native importer updates (still in testing)
  - Fixes to attack to hit, crits, and damages
  - Refinement to notes capture
  - Code reformat/refactor
  - Update to properly handle ability modifiers
- Added Esper Genesis Rules test build. This is a pure Rules API test requiring a classes.txt file to be fully functional. If you are interested in testing this system build, please provide a copy of your Esper Genesis rules proof of purchase and contact Owlbear or KrilionGD (via discord) for access to the sample campaign template.

**\*\*** There are still a few outstanding bugs we're working through as well regarding map tokens and custom light textures in exported maps. This work is being done in parallel to the experimental builds above, however it is not ready for this release.