Solo DBA for DBA Version 2.2

1. Introduction
1.1. Description

Solo DBA provides a method of playing one side of a De Bellis Antiquitatis (DBA) game against a human opponent. The intention is that the automatic (non-human) player plays sensibly, but not too predictably. It was developed by Richard Lee, Dale Hurtt and other participants in the Solo DBA Development Project. This terrain system, deployment and tactical engine were developed from "Random Terrain Placement" by John Meunier and "De Bellis Solitarius" by Chad La Mons, taken from the Fanaticus website.

This version is intended for DBA version 2.2.

1.2. Terminology

- **NPG**:   The Non-Player's General
- **YOU/YOUR**:   Refers to you the human player (i.e. the NPG's opponent)
- **Bad Going Troops**: Psiloi, Auxilia, Warband, Bow

2. Army Composition

Select which armies will be used by the NPG and YOU. Then:

2.1. Choose YOUR Army Options

If YOUR army has options, choose YOUR army's composition before that of the NPG so that you do not sub-consciously take advantage of your knowledge of the NPG's army composition.

2.2. NPG Army Composition

Work through the army list looking for options, but chose the general last (see below). Wherever there is an option, chose the elements by dicing. Select the option with the highest score (dicing again if more than one option had the highest score). Ignore any result that would cause an odd number of pike to be in the army.

2.2.1. NPG General

If the NPG has options for their general's element, throw a dice for each option, apply relevant modifiers (see below), and then choose the option with the highest final score.

Modifiers
- -2 Will cause there to be an odd number of pike in the NPG army
- -2 Mounted (except elephant) general when YOU have 4 or more bows
- -2 General will be slower than any other element in the NPG's army
- -1 Psiloi general
- -1 Elephant general when YOU have a total of 4 or more psiloi, auxilia, light horse, or any artillery
- +1 Infantry general of a troop type already present in NPG army
- +2 Mounted general of a troop type already present in NPG army

2.3. Attacker and Defender

Dice to determine which army is the attacker using the army aggression factors, as per the rules.

3. Terrain

If the NPG is the defender then select terrain from the NPG's compulsory and optional features:

3.1. Compulsory Terrain

Select one instance of the compulsory terrain feature. Arable terrain has 2 options for compulsory terrain.

3.1.1. Arable Compulsory Terrain

For 'Arable' terrain the compulsory terrain may be either a Built-UP Area (BUA) or road(s). Some players don't use BUAs. Players who do use BUAs should throw a D6, apply the modifiers and refer to the table:

Arable Terrain Compulsory Feature	
Dice Roll	Terrain Feature
Up to 3	BUA
4 or more	Road

Modifiers
- +1 Defender has 5 or more mounted elements
- +2 Defender has a total of less than 6 spear and blade
- +2 Attacker has artillery
- +3 Defender has no spear or blade but the attacker does

3.1.2. Multiple Compulsory Terrain Features

Some compulsory terrain types may have 2 pieces. For Woods, Steep Hills, Gentle Hills, Rough or Road throw a D6. If the defender has a total of more than 6 bad-going elements, add 1 for Woods, Steep Hills or Rough. If the score is 4 or more then select a second compulsory terrain feature.

3.2. Optional Terrain
3.2.1. Number of Features

Determine whether there will be 2 or 3 optional terrain features. Throw a D6, apply the modifiers and consult the table:

Number of Optional Features	
Dice Roll	Number
Up to 3	2
4 or more	3

Modifiers
- +2 Defender has more bad going elements than attacker
- +1 Attacker has more mounted than defender
- -1 Compulsory terrain includes 2 pieces of bad going
- -1 Defender has more mounted than attacker
- -1 Attacker has more bad going troops than defender

3.2.2. Littoral Options

Littoral terrain may have **either** steep hills **or** marsh. It may have **either** woods **or** dunes. If the defending army has littoral terrain, decide whether steep hills or marsh are appropriate. If both are appropriate for the defending army, throw 2 dice, 1 for steep hills and the other for marsh. Ignore the terrain type with the lower score when dicing to select terrain. Use a similar procedure to choose between woods and dunes.

3.2.3. Optional Terrain Selection

For each optional terrain feature for the defending army, throw a D6. Some terrain features may have up to 2 instances; for these throw a D6 for each possible occurrence. If attacker has littoral terrain and a waterway is an optional item of terrain for the defender then subtract 1 from the waterway's score.

There must be at least one feature that is bad going, a Waterway or a River. If this has not already been chosen as compulsory terrain then select the relevant feature with the highest score. Select the other optional terrain features from those with the highest scores. If necessary, re-roll for ties.

3.3. Terrain Placement

"Near baseline", "far baseline", "right" and "left" refer to the current position of the human player during terrain placement. It is assumed that the human will be seated in the same position during terrain placement.

Re-roll for any result that would be illegal under the rules or is impossible because of terrain already placed.

3.3.1. Place Waterway

If a waterway has been selected as one of the terrain features then place it first. A waterway must be on one edge of the playing area. Throw a dice then refer to the table below:

Waterway Placement	
Dice Result	**Position of Waterway**
1-2	Right side of Battlefield
3-4	Left side of Battlefield
5	Far baseline
6	Near baseline

3.3.2. Place Built–Up Area

If a built-up area (BUA) has been chosen place it next. A BUA must fit completely within a 900 pace square rectangle in a corner. Throw a dice then refer to the table below for the approximate position:

Built Up Area Placement	
Dice Result	**BUA Position**
1-2	Near baseline on right
3-4	Near baseline on left
5	Far baseline on right
6	Far baseline on left

3.3.3. Place River

Rivers go from one edge to the opposite. They can meander (bend) so that they are up to $1\frac{1}{2}$ times the distance between the ends. They must avoid going within 600 paces of any battlefield edge except where they start and finish. They are allowed to cross 2 battlefield quarters only.

Throw a dice then refer to the table below:

River Placement	
Dice Result	**Position of River**
1-2	Left to right, between 12" and 18" from near baseline
3	Left to right, between 6" and 12" from near baseline
4	Near baseline to far baseline, between 6" and 12" from left side
5-6	Near baseline to far baseline, between 12" and 18" from left side

3.3.4. Place Other Area Terrain

Notionally divide the board into 9 sectors of equal size. For each piece of area terrain, roll two 2D6 of different colour to determine sector. All area features must have at least 50% of their area in the sector designated by the dice. If only one piece of Bad Going terrain is selected, it must straddle two quarters of the board in order to meet the rules for terrain placement in DBA.

Area Terrain Placement	
First Die	**Second Die**
1,2 = left	1,2 = near baseline
3,4 = centre	3,4 = middle
5,6 = right	5,6 = far baseline

3.3.5. Place Roads

If one or more roads have been selected and there is a built-up area (BUA) one road must contact or pass through it.

Roads go from one battlefield edge to the opposite. They can bend slightly to avoid other terrain features but should otherwise be fairly straight. They must not cross more than 2 battlefield quarters, so take care when placing them near the middle of the battlefield. Where they cross rivers is either a ford or bridge, depending upon whether or not a model bridge is available.

Notionally divide the battlefield in 9 sectors. For each road throw 1dice. Refer to the table below:

Dice Result	Road Position
1	Left to Right close to near baseline
2	Left to right close to middle
3	Left to right close to far baseline
4	Near baseline to far baseline, left side of battlefield
5	Near baseline to far baseline, middle of battlefield
6	Near baseline to far baseline, right side of battlefield

4. Deployment
4.1. Base Edge Selection for NPG Attacker

For a NPG attacker, select the preferred edge to deploy. For any edge not adjacent to a BUA (built-up area), throw a dice. Choose the edge that has the highest total score after applying the following modifiers:

Modifiers
- +3 Deployment zone is clear of rivers and bad going
- +3 The opposite deployment zone has a reasonable sized area of bad going near its centre
- +1 The opposite deployment zone has bad going within 6" in front of it and YOUR army has 6 or more elements of Knights, Cavalry, Light Horse, or Camelry
- +1 Deployment zone has gentle hills
- -1 The opposite deployment zone has bad going within 6" in front of it and YOUR army has 8 or more elements of Bad Going Troops
- -1 Waterway on the flank of the deployment zone and YOU have littoral terrain type
- -2 Waterway on the rear of the deployment zone and YOU have littoral terrain type
- -2 Deployment zone has bad going within 6" in front of it and NPG army does not have 8 or more elements of Auxilia or Psiloi
- -3 Deployment zone has a reasonable sized area of bad going near its centre

Once the preferred edge is selected, dice as per the DBA rules to determine which edge the NPG deploys on.

4.2. Camp Garrison

If the NPG has a camp, garrison it by either camp followers or spear. If the NPG army has spear, then throw a dice and add any modifiers that apply. If the result is 6 or more, garrison the camp with spear.

Modifiers
- +2 YOU have light horse
- +1 NPG has an odd number of spear
- +1 YOU have more mounted than NPG

4.3. Camp Placement

The NPG camp is placed according to the following rules in descending order of preference:

- Avoid a flank with a waterway if YOU have littoral terrain
- Avoid roads coming from the YOUR side
- Position camp behind bad going if available
- Position camp as close to the centre as terrain and the other rules permit

4.4. Built Up Area Garrison

Armies with infantry may garrison a built up area (BUA). Roll a D6, apply modifiers, then consult the table:

Built-Up Area	
Die Roll	**Garrison?**
Up to 3	No
4 or more	Yes

Modifiers
- +2 Defender has Blade
- +1 Attacker has no infantry except Psiloi
- +1 Defender has Spear
- -1 Attacker has Spear or elephant
- -1 Attacker has Psiloi as well as Auxilia, Spear or Blade, or more than one Spear
- -2 Attacker has Blade or more than 1 pike
- -2 Defender has no infantry except for bows or psiloi
- -3 BUA in Defender's side

Use the following rules in descending order of preference to select a garrison:

1. Pick blade if their number is not divisible by 3
2. Pick spear if there is an odd number of spear
3. Pick blade
4. Pick spear
5. Pick pike if there are an odd number of pike
6. Pick artillery
7. Pick horde
8. Pick auxilia
9. Pick warband

4.5. Tactical Groups

Form tactical groups of up to 4 elements each. If there is more than one mounted element then there must be at least two tactical groups containing mounted. The tactical groups should be of the same element type except for the following exceptions:

- Psiloi elements are committed to support blades, spears or auxilia if YOUR army contains a combined total of more than 3 mounted and warband elements. Priority of allocating psiloi is given to wherever they can provide rear support for 3 elements of the same type;
- Bows are interspersed with spear or blade elements if YOUR army has more than 3 mounted;
- Spears, blades or pikes may be combined within the same group. Pikes should be grouped in even numbers, if possible;
- Elephants may be grouped with up to a total of two other elements: auxilia, psiloi if YOUR army has no more than 2 mounted, or knights if YOUR army has 3 or more mounted.
- Excluding elephants, mounted elements may be grouped with other types of mounted elements.

4.6. Littoral Landing

Armies with littoral terrain may do a littoral landing if there is a waterway. If the NPG army has littoral terrain throw a dice and apply the modifiers below. If the total is 6 or more then the NPG may reserve troops for a littoral landing.

Modifiers
- +3 NPG is attacker
- +2 YOUR camp is within 6 inches from the waterway
- +1 There is bad going terrain near the centreline, near the waterway and NPG has auxilia (or camels if the bad going is dunes)
- +1 YOU have 10 or more elements that move 300 paces or less in good going
- +1 NPG has 8 or more elements that can move at least 300 paces in good going
- +1 YOUR army does not have littoral terrain
- +1 YOUR army has stronger infantry (more pike, blade and spear) than NPG
- -1 NPG has any elephants, artillery, horde or warwagons
- -1 NPG general moves at 200 paces in good going
- -2 Waterway at YOUR rear and NPG is defender
- -2 YOU as defender have deployed troops within 3 inches from YOUR camp
- -12 NPG is attacker and YOU have reserved 2 or more elements for a littoral landing

4.7. Deployment Position

There are 4 major positions within the deployment zone: 'Centre', is in the centre two quarters of the deployment zone, up to the furthest forward deployment position; 'Reserve', is 200 paces behind the centre position; 'Right Flank', is to the right of the deployment zone, up to 600 paces from the NPG baseline; 'Left Flank', is on the left of the deployment zone, up to 600 paces from the NPG baseline.

Throw 2 dice and add their score, apply the modifiers then refer to the table to decide where to attempt to deploy each group:

Deployment of Groups	
Dice Score	**Position**
4 or less	Reserve
5-9	Centre
10	Left Flank
11	Right Flank
12 or more	Littoral Landing/Right Flank

Modifiers
- -5 Mounted General which is the only mounted element
- -5 Infantry facing good-going when YOU have more infantry with high combat factors against infantry in good going and NPG has more mounted
- -3 Cavalry, Camelry, knights, blades or spears and YOU have reserved troops for a littoral landing
- -3 Mounted if both flanks are bad going
- +2 Psiloi or auxilia
- +3 Tactical group contains elephants or knights and is not the general who is the only mounted
- +3 Bad going troops and both flanks are bad going
- +4 Cavalry, Camelry, Light Horse and is not the general who is the only mounted element

Flanks may be joined to the Centre, or may have a gap between them and the Centre if they need to avoid a terrain feature. The Centre should be centred in the middle of the game board unless there are major tactical reasons not to, e.g. inconvenient terrain ahead. The Reserve is paced 200p behind the frontline.

It is possible to have the whole NPG army in one massive group in one area (e.g. Centre, Reserve, etc.). For example, the die results have three groups of Spartan spear being placed in the Centre. The Spartans are thus placed in a huge phalanx, which might be 2 ranks deep, 6 elements abreast or a line of 12 elements.

Deploy the groups following these rules:

1. Deploy pikes in 2 ranks;
2. A maximum of 4 elements may be used for a littoral landing. If more than 4 elements are chosen for a littoral landing then throw a dice for each tactical group and select the one with the highest score. Elements not used for a littoral landing are deployed on the right flank.
3. Do not deploy psiloi facing cavalry, camelry or knight with no bad going between them;
4. Do not deploy war wagons or elephants facing within one base width of YOUR artillery;
5. Deploy troops in column if they are in, or will soon enter bad going, or to avoid deploying in bad going. Otherwise deploy in line if space permits.
6. If the NPG army has 6 or more warband elements, throw a D6; on a 1-3 deploy the elements in two ranks; otherwise deploy one warband element on each flank of the group (one rank deep) with the remaining in two ranks;
7. If YOUR army has 5 or more spear elements and the NPG army has 6 or more spear elements, throw a D6: on a 1-3 deploy the elements in two ranks; otherwise deploy one spear element on each flank of the group (one rank deep) with the remaining in two ranks;
8. The fastest elements are placed on the outer extremities of a position unless that will mean mounted troops facing or being deployed in bad going. Fastest mounted have priority over slower mounted;
9. Deploy the general as close to the centre of the position as is consistent with the other rules;
10. If non-bad going troops are to be positioned on a flank in bad going or that has bad going ahead within 600 paces then deploy them on the other flank if that is clear of bad going;

Some placements may be impractical due to the presence of impassable terrain or terrain an element cannot enter (e.g. the die roll indicates that a group of two Ottoman bombards are to be placed on the left flank where there is a large bad going marsh). Since Artillery can't be placed off-road in bad-going, the 2 Artillery must roll for a new position.).

4.8. NPG Defender Option to Swap Elements

Once YOU have deployed, use your tactical judgement whether or not to swap up to the 2 pairs of elements that the defender is allowed to do for the NPG. Look to see which elements on YOUR side are facing those of the NPG. Ignore any matches where there is bad going or impassable terrain between them. Try to avoid bad match-ups for the NPG and try to create bad-match ups for YOU.

4.8.1. Bad Match-Ups

- Psiloi faced by cavalry, camelry or knights
- Elephants faced by psiloi, auxilia, light horse or artillery
- Knight faced by elephants, scythed chariots, light horse or bows
- Cavalry, camelry ,light horse or warband faced by scythed chariots
- Pikes or spears faced by elephants, knights or scythed chariots
- Blades faced by knights or scythed chariots
- Hordes faced by elephants, knights, scythed chariots, warband, bows or artillery
- War wagons faced by elephants or artillery

5. Tactical Engine

5.1. Actions

The tactical engine guides the NPG by prioritising the actions that the NPG may make. The actions are:

- **Aggressive Attack** – Attack YOUR troops by shooting or close combat whenever there is an equal of the NPG killing YOUR elements compared to YOUR chance of killing NPG elements;
- **Aggressive Manoeuvre** – Move NPG troops to either threaten YOUR troops or facilitate a future attack;
- **Calculated Attack** – Attack YOUR troops by shooting or close combat whenever there is a better chance of destroying YOUR elements than NPG elements;
- **Defensive Manoeuvre** – Move NPG troops to defend against a threat from YOUR troops, e.g. to face a flank attack or to move psiloi into bad going to protect against YOUR cavalry;
- **Form Column** – A group forms a column, usually to facilitate passing through bad going or a gap;
- **Form Line** – Columns form line,
- **Occupy Terrain** – Move bad going troops forward to occupy bad going or a hill;
- **Re-arrange Line** – Move NPG troops so that they change position within an existing group, e.g. widen a group by putting elements in rear support into the front line, putting elements from the front rank into rear support or moving rear support;
- **Reckless Attack** – Attack YOUR troops by shooting or close combat when there is a chance of the NPG killing YOUR troops but YOU have a higher chance of killing the NPGs;
- **Re-enforce** – Move NPG troops towards an existing group or single element as a re-enforcement;
- **Repair Line** – Move elements that have been recoiled or pushed back, or which have been brought to within one move away from their anticipated position, into position in a line.
- **Safe Attack** – Attack YOUR troops by shooting or close combat whenever there is a chance of destroying YOUR elements but no chance of destroying NPG elements;
- **Support Attack** – Attack or shoot as part of a coordinated attack on YOUR forces, i.e. attack to make a simultaneous attack on YOUR forces more effective;

5.2. Aggression Level

The aggression level determines whether or not the NPG tends to play aggressively or defensively throughout the game. It is determined once, at the start of the first NPG bound, and affects what the NPG does in all following bounds.

Throw a dice. Apply the modifiers then refer to the table below.

Modifiers
- +2 NPG has 5 or more mounted elements
- +1 NPG has an army with eleven or more elements that move at least 300 paces in good going
- +1 NPG has 6 or more warband and YOUR army has 6 or more spear
- -1 NPG has a total of more than 4 auxilia and psiloi and YOU have a total of more than 4 cavalry, knights, blades and spear;
- -2 NPG has a total of 6 or more spear, blades and pike

Dice Plus Modifiers	Aggression Level
2 or less	Defensive
3 or 4	Neutral
5 or more	Aggressive

5.3.   Each NPG Bound

At the start of each NPG bound roll 2 dice. (It is helpful to use different coloured dice.) The first die determines PIPs. The second die determines the NPG tactical stance for this bound (essentially what element(s) shall warrant priority in expending move points).

NPG Tactical Stance	
Die Roll	Battle Plan
0-2	Defensive
3-4	Cautious
5+	Aggressive

Modifiers
- -1 Each element the NPG has lost
- -1 NPG has 'defensive' aggression level
- -1 NPG has 1 or 2 PIPs
- +1 Each element YOU have lost
- +1 NPG has 'aggressive' aggression level
- +1 NPG has 5 or 6 PIPs
- +4 NPG has lost 3 elements but YOU have lost 2 or less

Permitted moves for the 3 tactical stances are listed in descending order of priority. Exercise your best tactical judgment, but attempt to find useful higher priority moves for the appropriate tactical stance in preference to the lower priority moves. Consider using the 'Tactical Engine Override' (see below) if the tactical engine seems to be making a very bad choice.

Permitted Moves for the NPG Tactical Stances in Descending Order of Priority		
Aggressive	**Cautious**	**Defensive**
Safe Attack	Defensive Manoeuvre	Repair Line
Support Attack	Safe Attack	Defensive Manoeuvre
Calculated Attack	Support Attack	Re-enforce
Aggressive Attack	Occupy Terrain	Form Line
Aggressive Manoeuvre	Calculated Attack	Occupy Terrain
Reckless Attack	Aggressive Manoeuvre	Safe Attack
Occupy Terrain	Form Line	Support Attack
Defensive Manoeuvre	Re-enforce	Calculated Attack
Re-enforce	Form Column	Aggressive Manoeuvre
Repair Line	Repair Line	
Form Line		

5.4.   Tactical Engine Override

Sometimes the tactical engine will either miss opportunities or not allow the NPG to deal with significant risks. There are a maximum of three opportunities per game to dice whether or not to ignore the choices that the tactical engine makes for that bound. An opportunity is used whether or not the dice allows the tactical engine to be overridden.

Throw a dice. If the score is 3 or more then ignore the tactical engine for this bound. If the score is 1 or 2 then follow the dictates of the tactical engine for this bound.