Vowel hiatus is a dispreferred phenomenon in many languages. When vowel sequences arise through morphophonological concatenations in (isi)Ndebele, hiatus may be resolved in one of three processes: (i) one of the two vowels undergoes elision; (ii) one of the vowels (mostly the first vowel in the sequence) undergoes glide formation; and (iii) the two vowels undergo vowel coalescence e the merging of the two vowels into a neutral vowel that has the qualities of both the two initial vowels straddling a word boundary. This article examines these vowel hiatus resolution strategies in (isi)Ndebele, through the theoretical explications of Optimality Theory (OT) and CV Phonology. In (isi)Ndebele, the featural qualities of the two vowels straddling a word boundary and the morphological contexts at which the hiatal configurations occur determine what process repairs vowel hiatus. Hiatus resolution is also invariably ONSET and feature driven: driven by Preferred Syllable Structure Rules(PSSRs) and constraints.